PHYSICIAN PAYMENT REVIEW COMMISSION

Annual Report
to Congress

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PHYSICIAN PAYMENT REVIEW COMMISSION

Annual Report to Congress

1994

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Since the Physician Payment Review Commission began its work in 1986, it has benefited from the many persons and groups that have furnished information, shared their views, and assisted in the analysis of a growing range of topics. The value of drawing on the insights and expertise of physicians and other health professionals, researchers, administrators, and consumers, among others, became clear during the Commission's early years of developing recommendations to improve the method for paying physicians and to control costs under the Medicare program. Those recommendations became the basis for the Medicare Fee Schedule and related policies enacted by the Congress in 1989. Since then, the Commission's agenda has expanded in response to new congressional mandates. Mirroring this, the Commission has consulted with an ever-broader array of groups. This annual report, which encompasses issues related to health system reform as well as Medicare and Medicaid policy, reflects input from many interests that will be affected by reform and that can contribute to its design. The Commissioners and staff are grateful for these contributions, which were invaluable to their work.

Staff of the Congress, the Health Care Financing Administration and other agencies of the Department of Health and Human Services, the Congressional Budget Office, the Congressional Research Service, the General Accounting Office, the Office of Technology Assessment, and the Prospective Payment Assessment Commission offered valuable time, resources, and advice as the Commission defined and carried out its work plan during the past year.

The Commission has also come to rely on a group of people who understand the demands of its work and consistently make high-quality and timely contributions to that effort. Social and Scientific Systems, and particularly Paul Menick, Mark Miller, Yimin Ngan, and Arlene Turner, applied their programming expertise to an ever-increasing number of data sets, each one presenting new challenges. Lynn Lewis met the editing pressures of the Commission's most extensive and diverse annual report to date with her usual high standards for quality and efficiency.

As in the past, the Commission called on its Advisory Panel on Access to help shape its analytical work related to Medicare beneficiary access. Congressional offices and the American Association of Retired Persons assisted the Commission in gathering information on beneficiary complaints about changes in access since the Medicare Fee Schedule was implemented.

As it developed the issues and options for this annual report, the Commission consulted with panels of experts on such topics as ensuring access for the poor, restructuring graduate medical education, risk adjustment, structuring health alliances, and meeting data needs for

health system reform. Staff of state Medicaid programs, commercial insurance companies, and Blue Cross Blue Shield plans also contributed to the Commission's work by participating in its survey on the adoption of the Medicare Fee Schedule by other payers.

In addition, the Commission solicited comments from many people and organizations concerned about the issues on its agenda. The information it received through formal testimony, comments on draft reports, and personal interactions informed all of its work.

Finally, the Commission would like to acknowledge the following people for their special contributions to its work in the past year: Margaret Amatayakul, Arlene Ash, Doug Badger, Lee Barrett, Larry Bartlett, Carol Bazell, Amy Bernstein, Carla Bodaghi, Troyen Brennan, Peggy Brink, Gary Cagle, John Cerisano, Gary Claxton, Barbara Cooper, Janet Corrigan, Stephen Davidson, Stan Dorn, Lorraine Driscoll, Carol Emmons, Frank Eppig, José Escarce, Linda Fishman, Louise Fox, Beth Fuchs, Marsha Gold, George Greenberg, Marcy Gross, Stuart Guterman, Jack Hadley, Jean Harris, Katherine Hayes, Lori Housman, Dick Hegner, David Helms, Catherine Hoffman, Andrew Hyams, Peter Jacobson, Steve Jencks, Stan Jones, David Keepnews, David Kehl, John Kelly, David Kendall, Charles Killian, Kathy Langwell, Robert Lapp, David Lee, Doris Lefkowitz, Andrea Levario, Larry Levitt, Bill London, Richard Luehrs, Hal Luft, Don Harper Mills, Robert Moore, Evelyn Moses, Margaret Murray, Michael O'Grady, Lisa Paine, R. Heather Palmer, Bernie Patashnik, Katie Puglise, John Ramey, Sally Richardson, Kate Rickard, Carolyn Rimes, Alice Rosenblatt, Leah Schroeder, Ellen Schaffer, Richard Sharpe, Kirsten Sloan, Barbara Smith, Terry Thames, Ken Thorpe, Ron Walling, Pete Welch, Elliot Wicks, and Judith Willis.

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INTRODUCTION

Concerns about extending access to care in an affordable manner have made health system reform one of the most salient issues on the congressional agenda. While there is a broad consensus on the need for change, there is a wide range of viewpoints on how that change should occur and how extensive reforms need to be. In the past year, both the Congress and the Administration have made a considerable effort to define the issues and develop alternative approaches to address them.

This *Annual Report to Congress* reflects the acceleration in activity and the breadth of the debate on reform. Just a year ago, the Commission devoted three chapters in its *Annual Report to Congress 1993* to health system reform issues. It began by describing the two major strategies for containing costs—rate setting and managed competition—and exploring the potential for combining them. It then described the elements of a national data strategy and made recommendations for restructuring graduate medical education. From that foundation, the Commission expanded its work to encompass policy and design issues that the Congress will have to consider in developing reform legislation. This year the Commission devotes 15 chapters to its analyses and recommendations on system reform issues.

Structuring reform begins with a decision about the general direction that reform should take. Much of the debate last year centered on whether market mechanisms could achieve cost-containment goals or whether policies that ensured these goals were met would be necessary. The former would require restructuring the insurance market to foster competition, whereas the latter calls for putting in place a system of expenditure limits that could be enforced either through setting payment rates for providers or premium limits.

As these general approaches evolve into proposals, decisions have to be made on a number of complex and technical issues. This year's report reviews these issues and the options for addressing them.

The challenge begins with setting goals for growth in spending and specifying the mechanisms for achieving them. Systems incorporating expenditure limits must define the methods used to set the limits accurately and fairly, as well as specify how premium limits and fee schedules should be structured and applied.

Insurance market reform calls for policies that encourage plans to compete over price and quality rather than selecting among individuals on the basis of their likely use of services. In addition, in a health system that features choice among plans, mechanisms must be specified for establishing equitable premiums (community rating) and for adjusting payments to plans

according to the risk of those who enroll. Decisions must also be made about the entities that will carry out these functions.

As coverage is expanded for the poor and uninsured, policies on cost sharing and service delivery that address the special access problems of these groups need to be developed. Health system reform must also specify a system of quality assurance to both raise the general level of quality and safeguard against the pressures to contain costs by diminishing current standards of care.

In Part I, *Reforming the Health System: Cost, Quality, and Access*, the Commission takes up each of these questions, setting out the design issues and assessing the options. In this process, it draws on the approaches contained in various proposals before the Congress and offers recommendations for structuring policies to enhance their effectiveness, given current data and system capabilities. After months of considering these issues, the Commission took a further step to outline its views on some directions in which reform should proceed. The concluding chapter of Part I sets out an approach to reform that preserves key concepts of many proposals while minimizing the tensions between their potentially competing objectives (see Chapter 11). Together with the other chapters in Part I, the Commission poses a direction for reform and also provides the technical advice it has traditionally given to the Congress on key design issues, should the general approach adopted differ from the one that the Commission recommends.

The Commission's consideration of reform issues continues in Part II, *Reforming the Health System: Complementary Policies*. There, it takes up a set of companion policies that, along with changes in the financing and delivery of care, can play an integral role in constraining costs. It sets out a strategy for making coverage decisions on new technologies and services and defines a federal role in funding and coordinating technology assessment. It follows up on the Commission's earlier recommendations to restructure graduate medical education by spelling out the decisions that must be made in implementing such a policy. The Commission extends its consideration of work force issues through a review of the practice patterns of nonphysician practitioners and recommendations for clarifying their roles and payment under health system reform. It also elaborates on its previous recommendations for medical malpractice reform and for a national data strategy that will produce timely information to monitor and improve system performance.

After reviewing issues related to health system reform, the Commission turns its attention to the Medicare and Medicaid programs in Part III, *Medicare and Medicaid*. These chapters reflect the Commission's ongoing responsibilities to monitor the implementation of Medicare physician payment reform and to develop policies to improve access for Medicaid beneficiaries. This part of the report begins by assessing the effect of the Medicare Fee Schedule on beneficiaries. It then updates the Commission's earlier work on Medicaid fees and calls for a periodic survey to monitor access for Medicaid beneficiaries. Two chapters are devoted to assessing the impact of the Medicare Fee Schedule on physician practice and

payments, as well as defining principles to guide changes in the Medicare relative value scale. The Commission then assesses Administration proposals for revisions in the Medicare Volume Performance Standard and a new form of volume standards for hospital medical staffs. The final chapter looks back at the experience with Medicare bonus payments for physicians' services in Health Professional Shortage Areas.

With a great deal of the Congress's health policy agenda focused on health system reform this year, the Commission has directed its work to support these deliberations as much as possible. Of the 22 chapters in this annual report, 15 deal with aspects of health system reform. Recognizing the wide range of perspectives in the Congress concerning the best approaches to extend access to care and contain costs, the Commission has made its analyses broadly applicable. Notwithstanding this emphasis on health system reform, the Commission has significant ongoing responsibilities for evaluation of the Medicare and Medicaid programs. The rest of this report is devoted to topics that are specifically applicable to these programs.

COST CONTAINMENT AND EXPENDITURE LIMITS

As the Congress considers options for health system reform, the opportunity to expand access and maintain a quality health system depends on designing policies that will result in effective cost containment. The Commission places a high priority on substantially reducing the rate of increase in spending on health care. Rising costs for Medicare and Medicaid are forcing cuts in spending for other programs and hampering efforts to reduce the federal deficit. In addition, higher premiums for private health insurance keep an increasing number of Americans from purchasing health insurance and reduce resources available for goods and services other than health care.

Long-term goals for the growth in spending on health services should be set relative to growth in gross domestic product (GDP) but not necessarily equal to it. Arguments can be made for a goal that exceeds GDP, especially if scientific breakthroughs appear to offer substantial gains in health from the application of additional resources. Nevertheless, current inefficiencies in the health care system may justify intermediate-term goals that equal GDP or fall below it as reforms become effective.

The system should take advantage of both market mechanisms and expenditure limits rather than rely exclusively on any one means of achieving cost containment. Despite signs that health care markets in some areas have become more competitive and could be strengthened further through insurance market reform, expenditure limits may still be needed. Combining these two approaches would limit the impact of failure and position the system to emphasize whichever strategy was more successful.

Expenditure limits can be enforced through fee schedules for provider payment and premium limits for health plans. Fee schedules that apply to all services delivered outside provider networks would not only contain costs, but also make health plans offering free choice of providers more competitive.

Premium limits have the advantages of a more direct link to expenditure limits and a more decentralized approach to cost containment. They should be established only as a standby mechanism, however. Serious weaknesses in available data and methods could create unintended inequities and disrupt the delivery of care. A standby approach would also provide an opportunity to determine the capability of restructured insurance markets to control costs. Such a policy should include a specific criterion to trigger the application of premium limits. In the meantime, the database and tools required for premium limits to operate fairly and effectively should be developed. A standby approach would yield less in the way of savings, however, requiring either a reduction or delay in expansion of coverage or additional revenues.

Regardless of the emphasis on market mechanisms or expenditure limits to achieve cost-containment goals, an effective policy should be accompanied by complementary initiatives that can play a synergistic role in containing costs. Policies to constrain physician supply, reform the medical malpractice system, support outcomes research and practice guidelines, and pursue a national data strategy would support efforts by health plans and providers to deliver care in a more efficient manner.

SETTING PREMIUM LIMITS FOR PLANS

Premium limits offer a mechanism to ensure that health plans meet prescribed standards for cost containment. They are applicable to all health plans, whether fee for service or managed care, and shift more of the decisionmaking on how to achieve cost savings to health plans.

But premium limits have significant drawbacks. They might, for instance, inadvertently be set too low because little is known about health plans' current costs, likely changes in costs before limits are implemented, or plans' ability to reduce costs further in response to pressure. Premium limits might also interfere with the competitive process by creating a de facto price floor or by raising barriers to entry of new health plans into a market. One specific element in the Administration's proposal would base limits on what health plans charged during the first year. This provision could inadvertently penalize efficient plans, dissuading them from initially setting premiums as low as possible.

Premium limits could be applied and structured in a manner that would reduce some of these drawbacks. For example, they could be implemented as a backup mechanism as outlined above. Basing the trigger on national trends in spending rather than on those at the state or alliance level would enable cost-containment objectives to be met with less disruption.

Applying uniform limits to all plans in a market, rather than differentiating them for each plan depending on what it charged in a previous year, would maintain incentives for plans to set low premiums, avoid constraining growth by the most efficient plans, and reduce potential gaming. A transition from plan-specific to marketwide premium limits should be incorporated to give plans time to adapt and to allow for further strengthening of risk-adjustment methods.

SETTING PAYMENT RATES FOR PROVIDERS

Whatever approach is chosen to contain costs under health system reform, the Commission contends that fee schedules should be central to structuring fee-for-service payments. Fee schedules can play both a direct role in enforcement of expenditure limits and an indirect one, by augmenting the capability of fee-for-service plans to conform to premium limits. In the absence of expenditure limits, fee schedules would still be an important mechanism to realign incentives faced by different types of physicians and to help fee-for-service plans remain competitive.

In either case, fee schedules for services of practitioners should incorporate a national relative value scale based on a refinement and expansion of the Medicare relative value scale. The relative value scale should incorporate resource-based methods for valuing the practice expense and malpractice expense components of the fee schedule.

As with Medicare's payment reform, limits on balance billing should be an integral part of a policy on fee schedules. Charge limits are important to constrain costs to patients. At the same time, an allowance for balance billing may serve as a safety valve for physicians who do not perceive the fee schedule as adequate. Physicians' charges should be limited to a fixed percentage amount above established fee schedules. Physicians who choose to balance bill within these allowed limits should disclose their balance billing percentage on an annual basis. This percentage should be applied to any service for which there is a balance bill. Low-income individuals who are eligible for premium subsidies should be exempt from any balance billing in the same way that Medicare beneficiaries who are also eligible for Medicaid benefits are today.

Provider payment rates should be updated through a process of negotiation or consultation that works toward achievement of cost-containment goals. A formula similar to the Medicare Volume Performance Standards (VPS) that considers prior-year spending should be a starting point for the decision process. If premium limits are activated, the update of the fee schedule's conversion factor should be guided by the requirements of health plans with fee-for-service components to comply with the limits.

For such formulas to provide sound guidance, careful attention must be given to differentiating spending goals across categories of service (for example, inpatient hospital, outpatient hospital, physicians' services, or prescription drugs) to reflect trends in medical care delivery. In particular, relatively few categories of services should be established, each with a historical baseline, and substitution across categories should be tracked. Physicians as a group should share in a limited way the bonuses and penalties for changes in volume of hospital admissions, prescription drugs, and certain other types of services they prescribe.

The Administration's proposal would require all managed-care plans, including health maintenance organizations (HMOs), to offer a point-of-service option, with the cost-sharing structure specified in regulation. Although some HMOs have been experimenting with such

options, the terms of the Administration's provision could force them to organize services in a manner that could compromise their effectiveness at containing costs and ensuring quality. Between preferred provider organizations (PPOs) and fee-for-service plans, those individuals who place a high value on unlimited choice of provider would have ample opportunities to enroll in a health plan that is set up to accommodate this. Plans should be permitted to offer a point-of-service option but should not be required to do so. Consideration should be given, however, to permitting disenrollment from HMOs if an enrollee's primary care physician leaves the health plan.

SETTING EXPENDITURE LIMITS FOR STATES

If the Congress opts for a system of expenditure limits, it should specify what methods should be used to set them accurately and fairly. In general, historical spending baselines should provide the starting point for specifying limits, with adjustments for the effect of changes in benefits and coverage owing to health system reform. Expenditure limits should encompass all services in a standard benefit package. If premium limits are used to enforce expenditure limits, plan premiums should be adjusted actuarially to reflect differences in cost sharing.

If expenditure limits are assigned to states or substate areas, technical and substantive issues need to be addressed. Existing databases are not accurate enough to support the development of sound baselines to determine the limits. Large discrepancies between estimates of state per capita spending based on the Health Care Financing Administration's (HCFA) national expenditure series and those based on Medicare claims data are especially troubling. Inasmuch as estimates based on Medicare data are likely to be more accurate, these discrepancies cast doubt on the ability to develop baselines that accurately reflect historical spending by the non-Medicare population. Erratic year-to-year patterns in Medicare spending at the state level suggest that any one-year baseline will be inequitable to many states. Moreover, Medicare claims files are the only database that provides comparable information on spending in substate regions.

Resolving these problems will require collecting and adjusting data on insurance premiums. Although an ambitious effort is under way to gather such information, it is too early to tell whether this undertaking will achieve its objectives. Having accurate premium data may require establishing reporting responsibilities on the part of health plans and perhaps awaiting the implementation of the standard benefit package specified under health system reform.

Another key decision related to expenditure limits for states or substate areas concerns selection of a methodology to specify the limits. Each area's limit could be tied to its historical rate of spending, with adjustment for the differential effect of expanded insurance coverage. But this would lock into place a pattern of highly disparate rates of spending. Uniform limits on the rate of growth in spending would inadvertently place much more

pressure on those areas where spending has been lower. Use of a uniform limit on the level of spending, with adjustments for differences in input prices, demographics, and health status, would resolve this problem. But the magnitude of differences between such a uniform limit and historical patterns of spending indicate that this approach may not be feasible in the short run. Initially, expenditure limits should be based on historical spending, but then move toward a uniform spending level. The pattern of the transition should be specified in the health reform legislation rather than deferred to a future process.

STRUCTURING THE HEALTH INSURANCE MARKET IN A REFORMED HEALTH CARE SYSTEM

Many health reform proposals would attempt to alter aspects of the health insurance market that have led to high administrative costs, weak competitive pressures to contain costs, and either high prices or exclusion from the market for those with chronic illness. Some proposals would create a public fee-for-service plan, but would also offer private managed-care plans as options. Competitively oriented proposals would revamp the insurance market by setting rules for behavior that health plans must follow and by establishing purchasing groups or alliances.

The goal of competition-based reform proposals is, in essence, to promote price and quality competition among health plans, reduce the incentives and ability of plans to avoid enrolling consumers with higher health risk, and ensure that consumers face equitable premiums. These goals are pursued through a combination of new rules for competition in the insurance market and assignment of responsibilities for enforcement to new or existing entities.

Policies like risk adjustment and community rating reduce the incentives to plans to avoid risk while rationalizing premiums to consumers. Other policies can reduce plans' ability to segment risk and improve consumers' ability to compare plans. For example, a standard benefit package not only would keep consumers from choosing health plans depending on the benefit structure and their expected service needs, but also would prevent health plans from tailoring their benefit structure to attract healthy people. Additional policies to improve the insurance market include coordinating open seasons, requiring plans to accept all who seek to enroll, monitoring consumer satisfaction, and limiting marketing activities.

The alliances or purchasing groups advanced by many proposals would perform tasks for small employers and for individuals purchasing health insurance similar to those that corporate benefits managers now perform. Among these are selecting health plans that meet certain standards for access and quality and requiring plans to accept anyone who seeks to enroll. Other tasks include determining what characteristics of enrollees can be a basis for premium differences (community rating), adjusting payments to plans on the basis of an individual's likely use of services (risk adjustment), and controlling the health plan marketing process. Some reform proposals specify an administrative role for alliances or purchasing

groups, while others leave these functions to a variety of existing government agencies. In either case, one or more entities must be given the responsibility and resources to carry out the functions necessary to organize an effective insurance market.

Reform plans vary according to whether purchasing groups should be voluntary or mandatory and, if the latter, which employers or individuals should be required to use them. Voluntary groups would have the advantage of being able to select health plans more aggressively—since due process requirements would not apply—and of having their continuation subject to a market test. This approach, however, would entail higher administrative costs due to duplication of some functions. To avoid market segmentation, an entity of government would have to perform risk adjustment among the voluntary purchasing groups.

The creation of mandatory purchasing entities, such as the regional alliances under the Administration's proposal, can be divorced from the question of whether to restructure insurance markets for small employers and individuals. In most cases, existing governmental entities can perform these functions provided they are given the legislative authority and resources to do so. Creation of quasi-governmental entities to take on these roles might hold the potential for superior performance of these functions, but raises concerns about accountability.

COMMUNITY RATING OF HEALTH INSURANCE PREMIUMS

Key elements of a health system that emphasizes choice of health plans by individuals are the related policies of community rating and risk adjustment. Community rating specifies those enrollee characteristics for which premiums may or may not vary. It establishes premium classes and specifies the geographic areas in which rates by class must be uniform. These are called community rating areas (CRAs). The objective is to have a pattern of premiums that is fair to individuals with different characteristics and keeps insurance affordable for those with high projected use of services. Most proposals would authorize different premiums to single persons versus families but prohibit differences on the basis of health status.

CRA boundaries should separate areas on the basis of differences in input prices but not because of differences in health status. Boundaries should not be drawn through highly populated areas, since the incentives for employers to favor—and health plans to avoid—individuals residing in the low-premium side of the boundary could lead to distortions. CRAs should include entire metropolitan statistical areas, regardless of state boundaries, and could include adjacent rural counties. They could differ from the areas that purchasing groups serve.

RISK ADJUSTMENT

Effective community rating in a market with competing plans requires a mechanism for risk adjustment. Otherwise, those plans that attract enrollees with high needs for health services

would be penalized and may not survive. A mechanism is needed that ensures plans are fairly compensated for the relative health risk of their enrollees. The combination of community-rated premiums for consumers and risk-adjusted payments to plans would create premiums that are fair from the perspective of consumers and plans alike.

A serious concern is that risk adjusters for which usefulness has been established may not sufficiently capture variation in plans' costs that result from differences in health needs of those who enroll. Existing research provides little information on how well risk-adjustment formulas could capture the selection that occurs in markets with multiple insurance options. Even more difficult to predict is what will happen in an environment where the rules under which plans compete for enrollees would be substantially changed.

Some experts claim that inadequate risk adjustment could be the Achilles' heel of competitive approaches to health system reform, preventing the emergence of effective market competition. Others have pointed out that examples exist in which a broad and stable choice of health plans has been offered without any risk adjustment whatsoever. For example, the Federal Employees Health Benefits Program (FEHBP) does not employ a standard benefit package and does not adjust payments to plans for any factor other than individual versus family coverage. It also uses national rating for fee-for-service plans but local rating for HMOs. Although biased selection between fee-for-service plans that differ in benefit structure has been documented, a wide range of choices continues to be made available to federal employees. FEHBP's limited market share may make risk selection problems more tolerable to plans, however.

Prospective risk adjusters that have been shown to predict lower or higher utilization should be built into the system for determining payments to health plans. The system should start with risk adjusters, such as age and sex, for which data are most readily available. Other risk adjusters might be used as better data are developed. These could include health status, presence of specific medical conditions, eligibility for low-income subsidies, and institutionalization.

Given the shortcomings of current risk adjusters, risk-sharing mechanisms should be employed as well. Options include:

- prospective reinsurance pools, where plans designate in advance the individuals who they anticipate will be more costly than average and for whom they want to share expenses across an areawide pool;

- retrospective reinsurance, where plans get stop-loss coverage from an areawide pool for a portion of the costs of their most expensive cases based on actual claims experience; and

- partial capitation, where plans are paid partly through the capitated premium and partly through reimbursement for the actual use of services.

Regardless of the specific set of risk adjusters or the mechanism for risk sharing that is initially chosen, these mechanisms will need to be improved over time. The federal government should support research and development of improved risk adjusters and systems for risk sharing. States should be encouraged to adopt local modifications and to experiment with different risk adjustment systems, with the results used to support refinements of the system nationwide.

ENSURING ACCESS TO CARE FOR THE POOR

Most approaches to health reform would substantially change the financing and delivery of medical care to the poor, both by increasing the number of persons with insurance and by changing the arrangements under which Medicaid beneficiaries now receive insurance. But insurance alone is often not adequate to ensure access to care. Providers must be located where the poor can reach them, understand their medical needs, and be willing to serve them.

Health system reform should pay special attention to the challenges involved in meeting the health care needs of the poor. In particular, sufficient choice of plans and providers should be offered, with provider payments high enough to ensure access. If the Medicaid program is continued under health system reform, payment rates should be raised to Medicare levels.

Significant cost sharing (copayments and deductibles) could also restrict access or pose serious financial burdens. A lower rate of cost sharing should apply to those low-income persons whose premiums are subsidized. If the cost sharing is more than nominal, a catastrophic limit on cost sharing, lower than that applied to the general population, should be established for low-income individuals. Eligibility for reduced cost sharing should be determined and financed by government rather than by health plans or providers. Eligibility should be based on income rather than on welfare status.

Any proposal that provides coverage for the poor must consider whether low-income populations would be better served by policies that emphasize access to mainstream care or support alternative delivery systems designed to serve the poor. In fact, the most effective strategy for extending access may vary across communities. If providing access to mainstream care is a goal, then reforms should create incentives for private practice and managed care in underserved areas and furnish special supports, such as outreach and case management, that help the underserved gain access to the health care system.

Because insurance coverage alone has not opened mainstream care to some vulnerable populations covered by Medicaid, many see a continuing role for providers that have traditionally served low-income and hard-to-reach populations, such as community health centers and hospital clinics. Whether these essential community providers will be needed only in the short term or will continue to be important caregivers for vulnerable populations is unclear, given uncertainty about the impact of multiple changes that will occur in a

reformed system. Provision should be made for the continued funding of essential community providers during a transition period. Monitoring access and maintaining support for those that continue to play an important role in meeting the needs of underserved populations should be an integral part of reform.

QUALITY ASSURANCE

Health system reform presents challenges as well as opportunities for quality assurance. While pressures to contain costs will increase, so will attention to appropriateness of care. Health system reform represents an opportunity to expand the information available to consumers, physicians, and health plans that can be used to improve quality.

The federal government should establish a systematic approach to evaluating and improving quality, building on public and private efforts now under way. This approach should include:

- required quality performance reporting for plans that encompasses both fee-for-service and managed-care plans; and

- an external quality assurance review program for managed-care plans.

Providing performance reports to consumers could increase the role played by quality in competition among health plans. To be most effective, these reports should furnish both outcomes and process measures of quality, but should exclude measures that cannot be adequately adjusted for case mix. Reports should also provide indicators of consumer satisfaction and basic descriptive information about plan organization and facilities, as well as methods of paying physicians.

Quality indicators should be identical for all plans in a given market, and measurement methodology should be standardized. Certain core measures should be mandated by the federal government, although supplemental measures could vary by community. Auditing would be required to ensure the validity of reports on quality.

An external quality review program for managed-care plans could ensure a standard for health plan quality and could capture aspects of quality not amenable to consumer-oriented reports. Review should include an examination of the plan's internal quality assurance program, specified quality measures, credentialing of providers, communication with members about rights and responsibilities, grievance process, and medical records. These reviews could be conducted either by a government organization or by a designated accrediting organization.

Research is needed to develop more and better quality assurance tools and methods. Health system reform would require an increased commitment, especially by the federal

government, to research and development in the areas of outcomes and other quality measures, adjusters for differences in case mix, practice guidelines, profiling, performance reports, and tools to facilitate collection of data on quality of care and compliance with practice guidelines.

DIRECTIONS FOR REFORM

In studying the specific dimensions of health system reform, the Commission has offered various recommendations for structuring policies to enhance their effectiveness. But it seeks to go beyond making recommendations regarding how to structure particular policies most effectively by making an affirmative statement on the directions in which reform should proceed.

One such core recommendation is to create a national alliance that makes a choice of health plans available to individuals. A second is that choices offered by the national alliance would include an array of managed-care plans in local communities and one fee-for-service plan that is publicly administered and operates in a manner similar to Medicare's. If coupled with an individual or employer mandate, this structure would be an effective way to ensure universal coverage. These ideas are not intended to be a full proposal for reform. In fact, they are compatible with different choices on the other key elements of reform, such as financing. Rather, they suggest a way to minimize the tension between potentially competing objectives.

The first tension is between guaranteeing cost containment through premium limits and letting market forces operate freely. The need for premium limits may be obviated by establishing a single public fee-for-service plan—with its costs controlled by rate setting—as a strong competitor in the marketplace and linking the total cost of public subsidies to costs in that plan.

A second set of competing objectives poses the need to expand coverage and choice for the poor and uninsured against the pressure to control federal spending on subsidies that may be required to accomplish that goal. The guaranteed availability of a public fee-for-service plan could ensure that the poor have access to a full range of providers, but in a system in which total costs can be controlled.

A third tension is between structuring markets to enhance consumer choice and doing so in a way that is feasible and not unnecessarily complex. A national alliance could potentially perform the functions of structuring a market without creating numerous separate organizations or splitting natural markets.

COVERAGE DECISIONS AND TECHNOLOGY ASSESSMENT

Coverage decisions determine whether a health plan will provide technologies or procedures for particular clinical indications. Individual health plans bear the

responsibility for making coverage decisions today. But to give meaning to the concept of a standard benefit package, a national entity should decide for all health plans whether selected major new technologies and treatments are covered for particular indications. This would help ensure that all persons have access to these services when warranted and that health plans are not forced to provide services whose benefits have not been established.

The number of national decisions should be limited, however, and criteria should be developed governing when such decisions are warranted. Where no national coverage decisions exist, health plans should make them based on a critical appraisal of available data. The national body should maintain a list of the services and indications it has considered for which safety and efficacy have not been sufficiently established to warrant inclusion in the standard benefit package. Health plans may still cover these services, but should not be required to do so. This would help protect health plans from legal review that in the past has produced inconsistent and problematic results. Other disagreements between health plans and patients or providers about a coverage decision should be referred to an administrative or alternative dispute resolution system.

For selected covered services, the national entity could restrict coverage to settings in which the effectiveness of these services is being formally evaluated. Health plans should pay the full clinical costs of these covered services.

Coverage decisions today suffer from a paucity of reliable information about the risks and benefits of new technologies and procedures. A federal entity should set priorities for, coordinate, and conduct technology assessments in a timely manner for use in making coverage decisions. Federal funding should be increased for technology assessment as well as for health services research. When evidence of the safety and efficacy of an experimental technology or treatment is not yet sufficient to warrant coverage, plans generally should still contribute the cost of standard therapy toward the evaluation of these services in approved research studies.

The use of new technology and services is an important contributor to the rise in national health spending. The nation cannot in the long run afford to provide new technologies whose marginal benefits are minimal, but whose costs are high. The costs of technologies and services are not now being explicitly considered in coverage decisions, but they are relevant. Socially acceptable methods for considering costs along with benefits in coverage decisions need to be developed.

GRADUATE MEDICAL EDUCATION REFORM

The Commission remains committed to the graduate medical education reform policy it recommended one year ago. The major elements of its proposal are:

- a limit on the total number of residency positions to be funded;
- a federal entity that would determine the distribution of these slots by specialty;
- selection of those residency programs to be funded on the basis of educational quality;
- payment for the direct costs of graduate medical education from a national financing pool to which both public and private payers would contribute; and
- mechanisms to provide transitional financial relief to teaching hospitals that lose residents but still must meet essential service needs.

This year, the Commission has further developed this policy. It emphasizes the merits of a national allocation process over one based on consortia or other subnational decisionmaking entities. A national process is likely to be most successful at ensuring that specialty mix goals are met and that programs that are strongest educationally are the ones that are maintained. Provisions of the Administration's proposal for health system reform that deal with graduate medical education are similar to the Commission's in many respects.

The Commission has identified a trade-off between goals for limiting aggregate physician supply and changing the specialty mix to one more oriented toward primary care. Reducing the total number of residency and fellowship slots funded and immediately allocating a large portion of those slots to primary care would require unacceptably sharp reductions in the training of specialists. Compared with specialty mix, aggregate physician supply is more strongly linked to costs. Coupling this with uncertainty about the optimal specialty mix, the Commission places a higher priority on limiting aggregate supply.

With the recent emphasis on building a more competitive health care marketplace, some have questioned whether strengthened market forces would preclude the need for a national work force policy. There is uncertainty, however, concerning how quickly these forces will come into play and even if they do, how responsive teaching institutions and their faculty would be in their decisions on residency training. Significant risks are entailed in counting on the market to resolve the problem of physician supply. Nevertheless, a sunset provision would be an appropriate aspect of a national work force policy.

NONPHYSICIAN PRACTITIONERS

The expanding role of nonphysician practitioners (NPPs) in organized health care settings and an emphasis on primary care ensures an increasingly important role for these practitioners in patient care. The Administration's reform proposal underscored this by

including several provisions related to NPPs. These include expanding the scope of practice for NPPs, extending coverage and payment policy, and developing a program to broaden opportunities for graduate nurse education.

Commission studies have found that differences between nurse practitioners (NPs), physician assistants (PAs), and physicians are better described in terms of the roles each plays rather than by the particular tasks each performs. Under current arrangements, these practitioners often perform similar tasks, though the physician is professionally accountable and responsible for the patient. The most consistent description of working relationships between these NPPs and physicians is collaborative, a relationship that the Commission supports.

Compared with physicians, NPPs are more often located in underserved areas, but the proportions of both groups serving these areas remain relatively low. Merely increasing the supply of these health professionals would be a costly approach to expanding access for the underserved.

State practice acts vary considerably in regulatory approach and in the scope of practice they authorize for NPPs. In some states, the scope of practice authorized is unnecessarily narrow. Studies indicate a much broader range of practice in organized settings, suggesting both a need to reconsider some of these provisions and problems with enforcement of these laws.

Model state practice acts should be developed to set minimum standards for the scope of practice for advanced practice nurses and physician assistants. States should be given a time limit for bringing practice acts into compliance, after which the model acts would be imposed. At their discretion, states could adopt a broader scope of practice than the minimums required by the model acts. The model practice acts should address the issue of collaboration with physicians as it would apply to each category of NPPs.

This proposed approach differs from the Administration's, which would override existing state practice acts without having first developed model acts to replace them. Override of state laws in the absence of federal model acts would lead to the courts developing practice policies, a function they are ill equipped to perform.

Services in the standard benefit package should be covered when provided by nonphysician practitioners to the extent they are allowed to perform them under state practice acts.

In 1991, the Commission recommended that the payment rates for services provided by NPPs should reflect differences in resource costs for work, practice expense, and malpractice expense, and thus should differ from those for physicians. This principle should apply to fee schedules under health system reform. The Commission reiterates its previous recommendation that Medicare bonuses for services provided by physicians in Health Professional Shortage Areas (HPSAs) should be extended to those delivered by nonphysician practitioners.

The federal government should support NPP training. Decisions about the level of support, however, should await a systematic assessment of the future needs for these health professionals. These decisions should be made as broader health work force policies are formulated, rather than in isolation.

MEDICAL MALPRACTICE REFORM

The medical malpractice system needs to become more effective and efficient in limiting the rate of medical injuries and compensating injured patients. Reform should address widespread concerns that the system promotes the practice of defensive medicine and impedes many efforts to improve the cost effectiveness of care.

Profound changes are necessary to substantially improve the system's performance. A restructured malpractice system would have two components: an efficient administrative system to compensate patients who experience medical injuries, and a complementary structure for monitoring, quality review, and design and implementation of measures to reduce the rate of injuries.

Steps should be taken now to craft a system for the future. First, binding alternative dispute resolution systems for compensating injured patients should be developed. Second, more reliable standards for compensation should be formulated and tested. Finally, better data on medical injuries should be collected and employed to prevent injuries and improve the quality of care.

So that the current malpractice system functions more effectively, the Congress should effect the widespread adoption of certain tort reforms. These include:

- reasonable schedules for noneconomic damages (interim limits may be employed until a schedule is adopted), offset of awards for collateral source payments, periodic payment of large awards, and assignment of punitive damages awards to quality improvement activities;
- schedules for attorneys' contingency fees, thresholds for joint and several liability, reduction of statutes of limitations for minors to a reasonable period; and
- encouragement of the use of binding alternative dispute resolution methods (nonbinding methods should not be required).

Although initiatives to require certificates of merit, accord special legal status to practice guidelines, and raise the burden of proof for punitive damages might improve the functioning of the malpractice system, current knowledge of their effectiveness is not sufficient to justify that they be federally mandated.

To begin development of the future malpractice system, the Congress should provide support for demonstrations and evaluations of binding alternative dispute resolution systems, enterprise liability, and alternative standards of compensability including no-fault. The federal government should support efforts to reduce injuries related to medical care.

Information in the National Practitioner Data Bank should not be disclosed to the public because of the likely adverse effects on the detection, compensation, and prevention of injuries and on disciplinary actions against physicians. Information on preventable injuries and malpractice payments should not be included in health plan quality reports for consumers until better data and measures of comparability are available.

DEVELOPING A NATIONAL DATA STRATEGY

A key element under any approach to health system reform is the development of a national data strategy. Over the past two years the Commission has reported to the Congress on its ideas for that strategy. Last year it made several recommendations on how an integrated data system might be designed to meet those objectives. The Commission reaffirms those recommendations.

To address the broad data needs of the federal government, local communities, and others, the Commission outlined a system of regional data organizations that would collect data from health plans. These organizations would verify the accuracy and comparability of the data and aggregate summary information to be used by the local community and the federal government for various monitoring, quality improvement, and regulatory functions. The Commission also recommended that the Congress authorize a federal data agency to be responsible for implementing the new system, including the establishment of basic data standards and basic principles of confidentiality and privacy.

In response to broadly held concerns regarding the need for administrative simplification, the Commission has developed a new recommendation on data clearinghouses. Physicians want to use a single standard form for each encounter and to send all the forms to one place. Similarly, consumers would like their providers to submit forms on their behalf and would like one place to go with questions, but want guarantees that their personal records remain confidential.

Data clearinghouses could be an important component in addressing these concerns. They differ from the regional data organizations because they would replace health plans as the organizations actually collecting data from providers and consumers. The federal government should study the feasibility and value of data clearinghouses by initiating a series of demonstration projects.

ACCESS FOR MEDICARE BENEFICIARIES

Providing access to physicians' services and protecting beneficiaries from financial liability were important goals of the 1989 Medicare payment reform legislation. To ensure those goals were met, the Congress called for monitoring of beneficiary access and financial liability.

The Commission continues to analyze data from a variety of sources to identify any access problems that may be emerging during the early stages of implementation of payment reform. Its findings remain encouraging. Access to care under the Medicare Fee Schedule appears to be good. Nonetheless, some vulnerable populations are still experiencing access problems.

Comparison of 1991 and 1992 results from the Medicare Current Beneficiary Survey suggest little change in access. Most beneficiaries could see a physician if they had a medical problem and had a particular physician or physician's office as a usual source of care. Beneficiaries also generally appear to be satisfied with the availability of care at night and on weekends as well as the quality of their care.

Disparities in access among different groups of beneficiaries found in 1991 are also reflected in the 1992 survey results, however. African American, Hispanic, and disabled beneficiaries, along with those lacking private supplemental insurance, continue to report more difficulties with access or lower satisfaction with care.

Few beneficiaries have complained about access to care. The Commission surveyed all congressional offices for information on complaints about access. It also collaborated with the American Association of Retired Persons (AARP) on a mail-in questionnaire about access problems distributed in the AARP's monthly *Bulletin*. In both cases, there were relatively few complaints. Those that were reported most often concerned access to primary care physicians for beneficiaries who had moved or otherwise experienced a break in an existing physician relationship.

Claims data also do not reveal a disruption of beneficiary access that might be linked to implementation of the fee schedule. A comparison of claims data from the first six months of 1993 with claims data from 1991 shows that the total volume of services per beneficiary continued to grow after the fee schedule was introduced, despite an overall reduction in payment rates. The 4.2 percent annual rate of growth in total volume between 1991 and 1993 was somewhat lower than pre-reform trends, however. A further comparison of Medicare carrier areas, grouped by size of payment rate changes, shows no clear relationship between these changes and changes in service use.

To learn about physician attitudes and behavior related to the fee schedule, the Commission sponsored a survey of 1,000 doctors conducted from November 1993 to March 1994. Results indicate that, in general, physicians continue to serve new Medicare patients and accept

Medicare rates as payment in full. Of those physicians who were accepting new patients, 95 percent were accepting new Medicare patients.

Payment reform has not adversely affected the trend toward increased willingness of physicians to be participating physicians and to accept assignment. Medicare claims data from the first six months of 1993 show that the proportion of total allowed charges billed by participating physicians increased to 83 percent in 1993 from 70 percent in 1991. Assignment of claims also increased to 92 percent of total allowed charges from 85 percent.

Beneficiary liability for balance bills has decreased sharply, consistent with the Commission's projections published in 1989. Balance billing declined from 7.0 percent of total allowed charges in 1990, before new charge limits were implemented, to 1.4 percent of total allowed charges in 1993, when the phase in of charge limits was completed.

While the early experience with payment reform is reassuring, beneficiary access and financial liability remain important concerns. The Commission will continue its monitoring efforts so as to detect any developing problems as early as possible. It will issue comprehensive reports on access and financial liability, with special emphasis on disadvantaged populations, in the spring of 1994.

ACCESS FOR MEDICAID BENEFICIARIES

On the basis of an earlier survey of Medicaid programs, the Commission expressed concern that Medicaid fee levels are too low to ensure that access for Medicaid beneficiaries is comparable to that afforded other populations. A new survey of program directors sponsored by the Commission shows that Medicaid fee levels continue to be low, but payment rates for obstetrical services and services for children have substantially improved in some states.

A comparison of Medicaid fees in 1990 and 1993 shows a 15 percent rise overall. Most of this is attributable to substantial increases in 10 states. As a percentage of Medicare, Medicaid fees climbed from 64 percent to 73 percent. Part of this gain reflects constraints on Medicare rates, however. Relative to private insurers, Medicaid fees have gained only a small amount. They average roughly 47 percent of rates paid by private insurers.

Large differences among programs continue. For example, Alaska, Arizona, and Wyoming all have Medicaid fees that are at least 125 percent of the national average for the Medicaid program. New Jersey, New York, and Rhode Island have fee levels that are about half the average.

Given evidence of low fees and other barriers to access for the Medicaid population, it is especially important to monitor access for program beneficiaries. A periodic survey of Medicaid beneficiaries in all states should be conducted to do this. With such a survey, HCFA

would have a meaningful tool to judge whether states are complying with the access provisions of the Omnibus Budget Reconciliation Act of 1989 (OBRA89). Under health system reform, such a survey should be extended to cover all the poor.

Through a pilot study, the Commission examined the feasibility and costs of such a survey. To obtain state-level estimates of how Medicaid beneficiaries' access compares to access of privately insured populations, mixed-mode (telephone and in-person) interviews with between 30,000 and 45,000 Medicaid beneficiaries would be required. Existing national surveys, like the National Health Interview Survey could provide comparative data on access for people with private insurance. Depending on the final survey design, such an endeavor would cost somewhere between $6 million and $12 million.

PHYSICIANS AND MEDICARE PAYMENT POLICY

Medicare payment policy since the mid-1980s has been characterized by substantial constraint on payment rates and a restructuring of payment rates to favor evaluation and management (EM) services at the expense of procedural services. Constrained payment rates have succeeded in substantially slowing the rate of growth of program spending. Medicare spending for physicians' services rose at an average annual rate of 4.8 percent between 1989 and 1993, compared with 12.1 percent between 1980 and 1989.

But a side effect has been a widening gap between Medicare's rates and those of private payers. Between 1989 and 1994, Medicare payment rates increased at an average annual rate of 0.5 percent, while those by private insurers rose at a rate of 3.4 percent.[1] In 1994, Medicare payment rates are estimated to be 59 percent of private insurer rates, a decline from 68 percent in 1989.[2]

The gap between Medicare payment rates and those of private payers is a significant concern for both physicians and beneficiaries. Currently, beneficiaries appear to have reasonably good access to physicians' services despite Medicare rates that are substantially lower than those of other payers. At some point, however, low payment rates may significantly affect physicians' ability or willingness to serve Medicare beneficiaries.

[1] The estimate for private insurers, which comes from claims data, is significantly lower than the 6.8 percent increase for the physician fee component of the consumer price index between 1989 and 1992. With the latter reflecting submitted charges, this difference mirrors the increasing degree to which private insurers are obtaining discounts from physicians.

[2] This comparison uses weights based on the pattern of use of Medicare beneficiaries. Previous Commission work that focused on the impact of private insurers paying at Medicare rates used weights based on the pattern of use of the privately insured population. With evaluation and management services constituting a higher proportion of services used by the privately insured (nonelderly) population, Medicare rates are higher relative to private insurer rates under the weights employed in the earlier analysis.

The decline in Medicare rates relative to those of private insurers may well continue. Although preliminary data on expenditures for 1993 suggest a large update for 1995 under the VPS, future performance standards will be harder to meet. OBRA93 set the allowed rate of increase for volume and intensity at 4 percentage points less than the historical trend. Unless Medicare volume slows or private payers constrain their rates more aggressively, this will further erode Medicare payments relative to private rates.

Proposed changes in Medicare payments under the Administration's reform proposal could accelerate this erosion. Various provisions affecting the VPS would tighten it substantially (see below). Since substantial changes in payment rates under private insurance are possible, the proposal could lead to a wide range of possible changes in the relationship between Medicare and private rates. Medicare rates might go up in relation to private rates, but they might also fall to 43 percent of private rates by the year 2000 under a worst-case scenario. This would be roughly comparable to the historical gap between Medicaid and private payment rates, and would clearly raise serious concerns about whether these rates were adequate to ensure access to care. The Congress should be cautious about policies that would further widen the gap through additional constraints on Medicare payment rates.

Turning to reforms in the structure of payment, provisions of OBRA89 appear to be having their intended effect. Analysis of claims data from 1991 through 1993 showed that the projected pattern of redistribution from the procedurally oriented specialties to the primary care specialties was taking place. For all physicians, payments per service declined by 4 percent over the two-year period. They increased by 17 percent for family and general practitioners, but only by 2 percent for internists.[3] For surgeons, payment rates dropped by 8 percent.

With a rise in the volume of services, Medicare payments per physician grew 4 percent over the two-year period. Payments to family and general practitioners climbed by 23 percent, but those to internists, who had experienced reduced volume, decreased by 2 percent. Owing to a relatively small volume increase, payments per surgeon fell by 4 percent.

Analysis of changes in Medicare payment for individual physicians from 1991 to 1992 showed that over a quarter of all physicians saw increases in total Medicare payment of 20 percent or more.[4] The median physician experienced an increase of 1 percent. Every specialty

[3] In Medicare claims data, the category "internists" includes some procedural internal medicine subspecialists as well as general internists. The changes in payment rates for general internists are likely to be somewhat more favorable than these estimates suggest.

[4] This analysis at the physician level differs from that outlined in the previous paragraph by covering a shorter time period. With the 1993 provider file not yet available, the analysis of changes for individual physicians covers only a one-year period. Variations among physicians within a specialty reflect price differences such as the effects of geographic adjusters, the narrowing of the range of allowed charges within a locality, and impacts of the termination of specialty differentials. They also reflect quantity differences such as mix of services, effects of the changes in visit coding on levels of service, and changes in quantity from one year to the next.

included both winners and losers. For example, one-quarter of family and general practitioners experienced a reduction in Medicare revenue of more than 10 percent, while almost half had an increase of that magnitude.

With implementation of the Medicare Fee Schedule, the visit codes were revised to make them more accurate and easier to use. In addition, carriers were instructed to interpret the codes more uniformly, and physicians were educated in their use. The Commission's survey of physicians, fielded after six months' experience with the new codes, revealed many complaints about the complexity of the system and discrepancies between time and content descriptors. But analysis of claims data for all of 1992 and the first half of 1993 shows some important successes.

Physicians appear to be using the new codes in a more discriminating fashion. For all classes of visits (for example, office visit with a new patient) fewer physicians used only one level of service in coding, and more physicians used all the levels of service. The most substantial improvements came in hospital visits. Tracking the average level of service within classes of visits over the first six quarters demonstrated stable patterns of coding over time.

ENSURING FAIR AND ACCURATE PAYMENT UNDER THE MEDICARE FEE SCHEDULE

Since introduction of the Medicare Fee Schedule in 1992, there have been a variety of changes to payment policy. These include the following:

- Relative work values have been refined.
- Practice expense relative values for specified services have been reduced.
- Three service categories under the VPS have been created.
- Several specific policies, such as restoration of payment for electrocardiogram interpretation, site-of-service differentials for specified services, and termination of lower payments to new physicians' have been implemented.

Additional policy changes have been recommended by the Commission in previous reports. Most important is revision of the practice expense and malpractice expense components of the fee schedule so that they are resource based. OBRA93 reduced practice expense relative values of selected services in a manner that moved them closer to resource-based values, as suggested by the Commission's methodology. The Congress appears to have reached a consensus that HCFA should develop resource-based relative values for practice expense by

1996 to prepare for implementation by 1997.[5] The Commission has also recommended development of Medicare and pediatric adjusters for those services for which the relative work involved in treating a typical Medicare or pediatric patient exceeds that required for others.

The manner in which policy changes have been implemented and further changes that have been proposed by the Administration raise concerns about the conditions under which relative value are revised. To address this, the Congress should specify a process for implementing changes to the Medicare relative value scale based on three principles:

- The relative value scale should be usable by all payers.
- Changes in relative values for services should be made only to improve the accuracy of resource-based payment.
- Changes in the relative amounts of the aggregate work, practice expense, and malpractice expense components of the relative value scale should be made only to improve the accuracy of the relationships among them.

Additional Medicare policy goals should be pursued through bonus payments and other mechanisms. In order to comply with congressional directives for budget neutrality or savings in a manner that is consistent with these principles, HCFA should be given the authority to change the Medicare conversion factor as well as to adjust relative values.

An important implication of the first principle is that changes in Medicare policy that are not applicable to other payers using the relative value scale should be made by adjusting Medicare conversion factors rather than by adjusting relative values. For example, the budget-neutrality adjustment associated with the termination of payment reductions for new physicians should have been made to the conversion factor rather than to relative values. On the other hand, budget-neutrality adjustments for refinements in relative work values are appropriately made through changes in work values for other services rather than through the conversion factor. HCFA's recent practice of making adjustments in relative work values of services in the same family is consistent with this principle.

On the basis of the second principle, the Commission recommends against the Administration's proposed changes in relative values to promote primary care services. These changes do not have a basis in existing research on resource-based relative values. Indeed, in some of the instances, the Commission's assessment of research has suggested changes in the

[5] Such a provision passed the House of Representatives in 1993 and was reported by the Senate Finance Committee as part of OBRA93. But Senate rules concerning what provisions can be included in budget reconciliation legislation led to the removal of the provision. Many observers expect this provision to be included in a future package of Medicare technical amendments.

opposite direction. Policy goals to support primary care services would be better carried out through explicit bonus payments.

The third principle is relevant to budget cuts accomplished through reductions in payment for particular services. For example, the OBRA93 reductions in practice expense relative values for selected services altered the balance between the three components of the relative value scale. It would have been more appropriate to distribute the reductions in practice expense relative values for some services to the practice expense component of other services and then obtain budget savings through a reduction in the conversion factor.

The Commission has examined how various Medicare policy changes since the fee schedule was enacted have affected the overall structure of payment rates. Refinements to the relative value scale, while important for specific services, have had negligible effects. By contrast, the policy of distinct updates for surgical services, primary care services, and other nonsurgical services under the VPS is likely to profoundly affect the pattern. When performance standards are set, each category has the same allowance for increases in volume and intensity, but recent trends show important dissimilarities.

If these trends continue, differences in updates will lead to a major distortion in the structure of payment rates over time. Under current law, the relative gain for primary care services, originally projected to be 31 percent, will increase by an additional 16 percentage points, which after compounding results in a total gain of 52 percent by the year 2000. For other EM services, the original gain of 31 percent is projected to shrink to 19 percent by 2000. Surgical services will benefit slightly, reducing the projected decline from 30 percent to 26 percent. But for nonsurgical procedures, the drop in relative payment rates will grow, rising from 19 percent to 29 percent. The VPS provisions in the Administration's reform proposal would exacerbate these changes. To avoid such distortions in relative payment, differential updates for categories of services should apply to payment rates for only one year.

ENHANCING MEDICARE VOLUME PERFORMANCE STANDARDS

Constraining growth in the volume of services—the principal factor driving spending for physicians' services—remains one of the most important goals of Medicare cost-containment policy. From 1986 to 1993, while payment rate increases totaled less than 4 percent, volume per beneficiary increased roughly 50 percent.

The VPS has been the Medicare program's principal tool for moderating volume growth. It sets an annual target for expenditure growth. The difference between this target and actual expenditures partly determines future updates in payment rates, so that low volume growth is rewarded by larger updates. This linkage between volume and payment rates tends to stabilize outlay growth over time and gives the physician community a collective incentive to constrain increases in volume.

In order to provide budget savings to fund health system reform, the Administration has proposed a series of modifications in the VPS as well as new volume standards for hospital medical staffs. Under the VPS, it proposes to modify the allowance for growth in volume and intensity in the default formula for performance standards (the target for rate of growth in spending). Current law bases the allowance on historical trends: the average volume growth in the last five years minus 4 percentage points.[6] The Administration's proposal would substitute a volume and intensity allowance equal to the growth rate in real GDP per capita and provide an additional 1.5 percentage points for primary care services.

From a technical perspective, this change is an improvement. Use of the historical trend reduces incentives to constrain volume. High or low volume growth eventually becomes part of the trend that determines the volume and intensity factor for future performance standards. The proposed revision would sever this linkage.

But current projections by the Medicare Actuary suggest that setting the volume and intensity factor equal to per capita GDP growth would lower the performance standard by 2.0 or 2.5 percentage points. With the default formula having just recently been made more stringent by OBRA93 and Medicare payments having declined substantially relative to those of private insurers, the Commission cannot support a further reduction of the default formula at this time. It should be linked to GDP, but an additional factor should be added so that expenditure growth is projected to be budget neutral with current law. Additionally, little justification exists for the higher performance standard for primary care services proposed by the Administration. Primary care services are already projected to have large gains in relative payment under current policies for the VPS (see above). These gains are in addition to those from the resource-based relative value scale.

A second major change suggested by the Administration is to operate the VPS on a cumulative basis. Currently, the VPS does not attempt to recapture the first two years of deviations in spending from the performance standard. For example, if expenditure increases were to exceed the performance standard in 1994 by 2 percent, the 1996 update to payment rates would be reduced by that percentage. The excess spending in 1994 and 1995 would not be recaptured, however. The Administration proposes a method to do this. In this example, excess expenditures in 1994 and 1995 would be offset by additional reductions to the 1996 update so that the cumulative outlays from 1994 through 1996 would meet the cumulative performance standards.

Operating the VPS on a cumulative basis represents a significant technical improvement that makes the VPS a more useful budgeting tool. Its budget impact is complex, however. If physician expenditures on average were to increase at the performance standard rate, then this policy change would not affect Medicare outlays or payment rates over time. On the other

[6] OBRA93 increased the amount subtracted from the trend from 2 percentage points to 4 percentage points.

hand, if physician spending growth were to exceed the performance standards on average, then budget savings would be achieved and payment rates would be lower.

Whether this proposal is suitable depends on how stringently the performance standards are set. If they are too low, the proposal would increase the gap between Medicare rates and those of private insurers, exacerbating the risks to access. The Commission supports having a cumulative VPS, but only if the performance standards are not reduced as in the Administration's proposal.

The Administration has also proposed a form of volume standards for medical staffs of individual hospitals. For physicians' inpatient services delivered in high-cost medical staff hospitals, 15 percent of payment would be withheld. Some or all of this withhold would be returned if volume of inpatient physicians' services per admission declined sufficiently.

Though this proposal is a novel approach to addressing the issues of practice pattern variation and volume growth, it should not be enacted. It would introduce physician profiling in a punitive context, concentrating significant payment reductions on just a fraction of physicians' services. It has the potential to create undesirable changes in physician behavior and to increase the cost and complexity of administering the Medicare program.

HCFA should build on its current efforts, which use profiling for educational and quality assurance purposes rather than for setting payment rates. It should consider ways to make profiling information more readily available to hospitals and physician organizations.

MEDICARE BONUS PAYMENTS IN HEALTH PROFESSIONAL SHORTAGE AREAS

For the past five years, Medicare has provided bonus payments for physicians' services in certain underserved areas. Physicians receive an additional 10 percent of the Medicare payment for services furnished in designated urban and rural HPSAs. Since recommending such bonuses in 1987 to facilitate access to care for underserved beneficiaries, the Commission has monitored the implementation of this policy.

Because of the gradual and relatively recent introduction of the bonus payments, conclusions cannot be drawn about whether the program's long-term goals of improving physician supply—and thus beneficiary access to care in underserved areas—are being met. The Commission has used claims and other administrative data, however, to assess the achievement of intermediate goals, such as securing physician awareness of eligibility for bonus payments, targeting underserved beneficiaries, and administering the payments efficiently.

Early program performance is generally favorable. An increasing number of physicians are claiming the bonus payments. In both rural and urban HPSAs, a major share of these

payments supports services for vulnerable populations, particularly poor beneficiaries. Significant targeting of primary care physicians and primary care services has also been achieved. The primary care orientation is stronger in rural areas, however, and the incidence of bonuses being paid for beneficiaries who do not live in HPSAs is more prevalent in urban areas. While this reflects the differences in resources and patterns of care between rural and urban areas, it stems partly from the difficulty in configuring the urban HPSAs.

The Commission evaluated a number of possible approaches to better direct the targeting of the bonus payments. Since each alternative had significant drawbacks or little hard evidence to support its potential advantages, the Commission chose not to endorse any.

Instead, the Commission reiterates its earlier recommendations for two refinements to the designation criteria for HPSAs. Bonus payments should be continued for an additional period in areas that lose their HPSA designation due to an increase in the physician-to-population ratio, and bonus payments should be provided in all nonmetropolitan counties where the poverty rate exceeds 25 percent. The Commission plans to examine whether the latter enhancement is feasible in urban areas.

COST CONTAINMENT AND EXPENDITURE LIMITS

Cost containment should be achieved by a combination of market mechanisms and expenditure limits. This combination would minimize the impact of failure of either and leave the system in a position to emphasize the more successful approach.

Regardless of the emphasis on market mechanisms or expenditure limits to achieve cost containment goals, the Congress should enact complementary initiatives (e.g., controlling the supply of physicians, medical malpractice reform, and a national data strategy to improve and monitor system performance) that can play an integral role in constraining costs.

SETTING PREMIUM LIMITS FOR PLANS

If premium limits are adopted as part of health care reform, they should be a backup or standby approach to cost containment. In the interim, the databases and methods needed to impose them accurately should be developed. Premium limits should be triggered only when total U.S. health spending exceeds the targeted level.

Premium limits ultimately should be uniform for all health plans in a market or community, rather than being based on what an individual plan charged in the past. A transition from plan-specific to marketwide premium limits should be allowed to give plans time to adjust and to allow for further strengthening of risk adjustment methods.

SETTING PAYMENT RATES FOR PROVIDERS

A uniformly applied resource-based relative value scale built on Medicare's should be the basic payment methodology for paying for all professional services delivered in fee-for-service plans and in the out-of-network segments of managed-care plans. Modifications should be made to Medicare's relative value scale to make it applicable to all payers and services.

Provider payment rates should be updated through a process of negotiation or consultation that works toward achievement of cost-containment goals. A formula similar to the Medicare Volume Performance Standard that considers prior-year spending should serve as a starting point for the decision process. Physicians as a group should share, in a limited way, the bonuses and penalties for changes in the volume of hospital admissions, laboratory tests, prescription drugs, and certain other types of services. Payment levels should be set initially

to be revenue-neutral for Medicare and private payers, but a goal should be set to phase out differences between Medicare and private payment rates over a period of years.

If premium limits are activated, the update of the fee schedule's conversion factor should be guided by the level at which plans with fee-for-service components would be better able to comply with budget targets.

Physicians' charges should be limited to a fixed percentage amount above established fee schedules. Physicians who choose to balance bill within these allowed amounts should disclose their balance billing percentage on an annual basis. This percentage should be applied to any service for which there is a balance bill. Low-income individuals who are eligible for premium subsidies should be exempt from any balance billing.

If expenditure limits are used to update provider payment rates, (1) relatively few categories of services should be established (e.g., inpatient hospital, outpatient hospital, physician); (2) separate historical baselines should be established for each category based on trends for the years prior to the enactment of reform; and (3) a process should be established for tracking substitutions across categories.

Health plans should be permitted to offer a point-of-service option but should not be required to do so.

SETTING EXPENDITURE LIMITS FOR STATES

With a system of expenditure limits, historical spending baselines should provide the starting point for establishing limits, with adjustments for the impact of changes in benefits and coverage resulting from health system reform. Expenditure limits should encompass all services included in a standard benefit package. If premium limits are used to enforce them, plan premiums should be adjusted actuarially to reflect differences in cost sharing.

Limits at the state or substate level should be based on a blend of historical spending and national rates of spending, with an increasing weight given to national spending over time. Adjustments to an overall national target should be made for various factors that may drive state variations but cannot be controlled, even in the long term. Applying expenditure limits to state or substate areas should be preceded by substantial data development.

STRUCTURING THE HEALTH INSURANCE MARKET IN A REFORMED HEALTH CARE SYSTEM

In a system where health plans compete to enroll consumers, certain rules should be adopted both to encourage competition among health plans on the basis of price and quality and to

make it easier to establish equitable premiums. These include such measures as a standard benefit package, coordinated open seasons for enrollment, limits on marketing techniques, a guarantee that plans accept everyone regardless of health status, community rating, and risk-adjusted payments to plans.

One or more entities must be given the responsibility and resources to carry out the functions necessary to organize an effective insurance market and to enforce rules of competition. These functions could be performed either by a governmental entity or by a combination of governmental and private organizations.

COMMUNITY RATING OF HEALTH INSURANCE PREMIUMS

Premiums paid by consumers should be community rated, meaning that premiums would be uniform within defined classes that apply to all plans. Health status, race, and sex are not appropriate bases for defining classes. To ensure plan viability under mandated community rating, a mechanism is needed to adjust payments to health plans to reflect the relative risks of those they enroll. The geographic areas to which community rating would apply should, at a minimum, include entire metropolitan statistical areas regardless of state boundaries.

RISK ADJUSTMENT

Prospective risk adjusters that predict differences in utilization should be built into the system for compensating plans. The methods used should be fully disclosed to all plans. The system should start with those risk adjusters such as age and sex for which data are most readily available. Additional risk adjusters are needed and should be incorporated as better data become available and as research shows them to be effective. These could include health status, eligibility for premium subsidies, and institutional status. Risk adjusters should be implemented in a way that protects privacy.

A system of risk sharing, such as a prospective reinsurance pool, retrospective stop-loss reinsurance, or partial capitation, should supplement the use of risk adjusters in order to ensure that plans are not unduly rewarded or penalized for biased selection. Efforts should be made to collect data on high-cost individuals through this system to develop improved prospective risk adjusters.

A process should be put in place for evaluating the impact of the risk-adjustment system on health plans and enrollees and for making timely refinements. The federal government should support research and development of improved risk adjusters and systems for risk sharing. States should be encouraged, with federal approval, to adopt local modifications and to try different risk-adjustment systems on a demonstration basis, with the results used to support refinements in the system used nationwide.

ENSURING ACCESS TO CARE FOR THE POOR

Health care reform should pay special attention to the challenges involved in meeting the health care needs of the poor. Efforts to monitor access to care for the poor are an essential element of reform to ensure that problems will be identified and brought to the attention of policymakers.

Eligibility for premium subsidies should be based on income rather than on welfare status.

Health care reform should limit cost sharing (copayments and deductibles) for those low-income persons eligible for premium subsidies. If cost sharing for the poor is more than nominal under health reform, a catastrophic limit on cost sharing lower than that applied to the general population should be established.

The burden of establishing eligibility for reduced cost sharing should not fall on providers of health care. Neither should providers or health plans have to absorb the difference when patients pay reduced cost-sharing amounts. Reduced cost sharing should be financed by the government.

Under approaches to reform that emphasize managed competition, provision should be made for the continued funding of essential community providers during a transition period.

If the Medicaid program is maintained under health care reform, Medicaid fees should be raised to Medicare levels.

QUALITY ASSURANCE

The federal government should establish a systematic approach to evaluating and improving the quality of care, building on public and private efforts currently under way.

Reports on quality of care in each plan, including both fee-for-service and managed-care plans, should be provided to consumers. These reports should contain both process and outcomes measures of quality adjusted for case-mix differences; information regarding member satisfaction; and basic descriptive information about the plan's organization, facilities, and methods of paying providers. Measures that cannot be adequately adjusted for case-mix differences should not be included in these reports.

Quality measures for performance reports and the methodologies for their measurement should be standardized for all plans in a market. Certain core measures should be mandated by the federal government, although supplemental quality measures could vary by local market area.

Health system reform legislation should require an external quality review program for managed-care plans. Review should include an examination of the plan's internal quality assurance program, specified quality measures, credentialing of providers, communications with members about rights and responsibilities, grievance process, and medical records.

Federal funding should be increased for research on quality of care, including that to support the development of outcomes and other measures, adjusters for differences in case mix, practice guidelines, profiling, performance reports, and tools to facilitate collection of data regarding quality of care and compliance with practice guidelines.

DIRECTIONS FOR REFORM

A national alliance should be available to individual and group purchasers, including those who currently do not participate in private insurance systems. In a manner similar to Medicare, it would offer a publicly administered fee-for-service plan and privately administered managed-care plans available in local communities. This option would be compatible with a variety of health reform proposals. It could be used to guarantee universal coverage by automatically covering anyone not otherwise insured.

COVERAGE DECISIONS AND TECHNOLOGY ASSESSMENT

A national entity should decide for all health plans whether selected major new technologies and treatments are covered for particular indications. National coverage decisions should be made for only a limited number of new technologies and treatments; criteria should be developed for when such decisions are warranted.

In the absence of a national decision, coverage decisions should be made by health plans based on critical appraisal of available data. The national entity should maintain a list of services and indications it has considered for which safety and efficacy have not been sufficiently established to warrant inclusion in a standard benefit package. Health plans may still cover these services, but should not be required to do so. Disagreements between health plans and patients or providers about coverage decisions should be referred to an administrative or alternative dispute resolution system.

For selected covered services, the national entity could restrict coverage to settings in which the effectiveness of the service is being formally evaluated. Health plans should pay the full clinical costs of these covered services.

A federal body should set priorities for, coordinate, and conduct technology assessments in a timely manner for use by the national coverage decision entity and health plans. Federal funding should be increased for technology assessment and health services and evaluative

research. When evidence of the safety and efficacy of an experimental technology or treatment is not yet sufficient to warrant coverage, plans still should generally contribute the cost of standard therapy toward the evaluation of the technology or treatment in approved research studies.

Socially acceptable methods need to be developed to consider costs along with benefits in coverage decisions.

GRADUATE MEDICAL EDUCATION REFORM

The Commission remains committed to the policy it recommended one year ago. The essential elements of its proposal are:

- a limit on the total number of residencies to be funded;
- a federal body that would determine the distribution of these slots by specialty;
- selection of those residency programs to be funded on the basis of educational quality;
- payments for direct costs of graduate medical education from a national financing pool to which all payers would contribute; and
- mechanisms to provide transitional relief to teaching hospitals that lose residents but still must meet essential service needs.

NONPHYSICIAN PRACTITIONERS

Model state practice acts should be developed to set minimum standards for the scope of practice for advanced practice nurses and physician assistants. States should be given a time limit for bringing their laws into compliance after which the model practice acts would be imposed. At their discretion, states could adopt a broader scope of practice than the minimum required by the model acts. The model practice acts should address the issue of collaboration with physicians as it would apply to the different categories of nonphysician practitioners.

Services in the standard benefit package under health system reform should be covered when provided by nonphysician practitioners, as allowed by state law.

The Commission's 1991 recommendations for differentials in payment rates for non-physicians' services under Medicare should apply to all fee schedules developed under health

system reform. Payments should reflect differences in physicians' and nonphysicians' resource costs: work, practice expense, and malpractice expense.

The bonus applied to Medicare payments for physicians' services provided in Health Professional Shortage Areas should also apply at the same percentage rate to payments for nonphysician practitioners' services provided in these areas.

MEDICAL MALPRACTICE REFORM

The Congress should effect the widespread adoption of certain tort reforms, including:

- reasonable schedules for noneconomic damages (interim limits may be employed until a schedule is adopted), offset of awards for collateral source payments, periodic payment of large awards, and diversion of punitive damages awards to quality improvement activities;

- schedules for attorneys' contingency fees, thresholds for joint and several liability, and reduction to a reasonable period of long statutes of limitations for minors; and

- encouragement of the use of binding alternative dispute resolution methods (nonbinding alternative dispute resolution should not be required).

Although initiatives to require certificates of merit, accord special legal status to practice guidelines, and raise the burden of proof for punitive damages have the potential to improve the functioning of the malpractice system, current knowledge of their effectiveness is not sufficient to justify that they be federally mandated.

Work should begin to develop a future malpractice system that would include a fast, efficient administrative system to compensate patients and a complementary system to detect and prevent medical injuries. To this end, the Congress should provide support for demonstrations and evaluations of binding alternative dispute resolution systems, enterprise liability, and alternative standards of compensability, including no-fault. The federal government should support efforts to reduce injuries related to medical care.

Information in the National Practitioner Data Bank should not be disclosed to the public because of the likely adverse effects on the detection, compensation, and prevention of injuries and on disciplinary actions against physicians. Information on preventable injuries and malpractice payments should not be included in health plan performance reports for consumers unless better data and measures of comparability are available.

DEVELOPING A NATIONAL DATA STRATEGY: AN UPDATE

The Commission reiterates its 1993 recommendations for creation of a national data system in which regional boards or carriers would collect data from individual health plans. A federal agency or board would establish basic data standards and oversee the system's implementation. The federal government should also support development of improved quality measures and improved risk measurement.

The federal government should support demonstration projects of regional data clearinghouses that collect all claims and utilization data directly from providers, health plans, and consumers and make necessary information available to payers, plans, government, and other interested organizations as appropriate. The projects would evaluate the feasibility of clearinghouses carrying out these functions and their ability to simplify claims submission and payment.

ACCESS FOR MEDICAID BENEFICIARIES

The Congress should fund a periodic survey of Medicaid beneficiaries to monitor their access to care. If health care reform is enacted, the Congress should fund a broader survey of low-income persons to monitor their access. In either case, the survey sample size should be adequate to measure access for such populations in each state.

PHYSICIANS AND MEDICARE PAYMENT POLICY

Although the growing disparity between Medicare and private payment rates has not yet caused measurable reductions in access, further divergence in those rates would increase the risk of adverse effects on access. The Congress should be cautious about policies that will further widen the gap through additional constraints on Medicare payment rates.

ENSURING FAIR AND ACCURATE PAYMENT UNDER THE MEDICARE FEE SCHEDULE

The Congress should define a process for implementing changes to the Medicare relative value scale based on three principles:

- the relative value scale should be usable by all payers;
- changes in the relative values for services should be made only to make resource-based payment more accurate;

- changes in the relative amounts of the aggregate work, practice expense, and malpractice expense components of the relative value scale should be made only to improve the accuracy of the relationships among them.

Other Medicare policy goals should be pursued through bonus payments and other mechanisms. Provisions of the Administration's health care reform proposal to change relative values to promote primary care are contrary to these principles.

In order to comply with congressional directives for budget neutrality or savings in a manner that is consistent with these principles, the Health Care Financing Administration should be given the authority to change the Medicare conversion factor as well as to adjust relative values.

The Commission reiterates several earlier recommendations that would promote fair payment:

- resource-based practice expense and malpractice expense relative values should be incorporated into the fee schedule;
- Medicare and pediatric adjusters should be developed;
- differential updates for services in the three Volume Performance Standard categories should affect payment for one year only.

ENHANCING MEDICARE VOLUME PERFORMANCE STANDARDS

The method for incorporating the volume and intensity factor into the Volume Performance Standard default formula should be changed. The use of historical trends in volume and intensity should be replaced by a formula linked to real gross domestic product per capita. This change in method should be implemented in a budget-neutral manner. There should be no additional allowance for primary care as proposed by the Administration.

The current Volume Performance Standard process should be replaced with a cumulative VPS. A single year's comparison between actual and targeted spending would no longer be used to set fee updates. Instead, fee updates would be based on a comparison of actual versus targeted spending cumulated over all years following some base year. This should be pursued, however, only if no further tightening of the performance standards occurs. In particular, this policy should not be pursued if the pure per capita GDP-based volume and intensity allowance contained in the Administration's health reform proposal is adopted.

Limits on the reductions in the maximum update from the Medicare Economic Index should not be removed, but the current limit of 5.0 percentage points should be made symmetric by applying equally to updates above the MEI as well as those less than the MEI.

The high cost medical staff proposal contained in the Administration's health care reform proposal should not be enacted into law.

The Health Care Financing Administration should build on its current efforts that use profiling for educational and quality assurance purposes rather than using profiling to set payment rates. HCFA should consider ways to make profiling information more readily available to hospitals and physician organizations.

BONUS PAYMENTS IN HEALTH PROFESSIONAL SHORTAGE AREAS

Medicare bonus payments should continue to apply to all physicians' services in urban and rural Health Professional Shortage Areas at the current level of 10 percent.

In addition, two previous recommendations are reaffirmed:

- In areas in which Health Professional Shortage Area status is withdrawn because of an increase in physician supply, Medicare should continue to provide bonus payments for an additional three years.

- Nonmetropolitan counties whose poverty rate exceeds 25 percent should automatically qualify for Medicare bonus payments, regardless of their Health Professional Shortage Area status. Because of the difficulty of clearly defining the geographic boundaries of inner city areas, the feasibility of broadening eligibility in urban areas should be explored.

CHAPTER 1

THE CONTEXT FOR REFORM

Health system reform has dominated the national agenda this year, fueling speculation that significant changes in the current system may soon be enacted. Reform proponents enjoy a consensus on the goals of health system reform: to contain rising costs, increase access, and ensure the quality of care. Disagreement revolves around whether reform should be comprehensive or narrow in scope and what will be the best strategy for change. Because the underlying problems are complex and interrelated, multifaceted solutions will be required.

This chapter describes problems in the U.S. health system that have set the stage for reform and places those problems in their policy context, providing a frame of reference for topics addressed in this report. To that end, this chapter describes public dissatisfaction with the health system and considers the problems of cost, quality, and access underlying this sentiment. It concludes by discussing strategies used to address these problems in health system reform proposals currently being considered in the Congress.

THE CALL FOR REFORM

Americans who have health insurance and access to providers express high levels of satisfaction with their personal situation, but their assessment of the system as a whole reveals much greater discontent (Table 1-1). Americans increasingly cite high and rising costs as their main health care concern, with access to care and quality of care rating second and third. Public opinion polls reveal that the percentage of people who see the need for fundamental change or total restructuring of the health system has grown over the past several years to more than 80 percent of those surveyed. These concerns are echoed by American physicians, three-fourths of whom say fundamental restructuring is required to address cost and access problems (Blendon et al. 1993).

By virtually any measure, the United States spends more on health care than any other country in the world. When compared with citizens of other nations, however, Americans typically express the greatest degree of dissatisfaction with their health system (Figure 1-1). Compared with the citizens of Canada and Great Britain, only Americans are so dissatisfied that they are willing to adopt the type of health system used in another country (Blendon et al. 1990; Blendon and Taylor 1989).

Table 1-1. Public Opinion on Health Care in the United States, 1993-1994

Personal Health Care

- 54% of Americans cite cost as their biggest personal health care concern (EBRI 1993).
- 81% of Americans are either very satisfied or somewhat satisfied with the health care services they receive (Kaiser Family Foundation and Commonwealth Fund 1993).
- Between 71% and 80% of Americans are satisfied with the quality of care they receive (CNN and *USA Today* 1994b, EBRI 1993, *New York Times* and CBS News 1993).
- 69% of Americans are satisfied with their health coverage and benefits (CNN and *USA Today* 1994b).
- 51% of Americans are concerned about losing their health insurance coverage at some point in the next five years *(New York Times* and CBS News 1993).

Overall Health Care System

- 84% of Americans believe there is a crisis in the health care system (CNN and *USA Today* 1994a).
- Health care is rated second to crime as the most important problem in the United States today (CNN and *USA Today* 1994a).
- 71% of Americans rate the overall health system as either fair or poor (EBRI 1993).
- 84% of Americans feel the health care system needs fundamental change or complete rebuilding (Kaiser Family Foundation and Commonwealth Fund 1993).
- 74% of Americans cite cost as the biggest health care problem for society (AMA 1993).

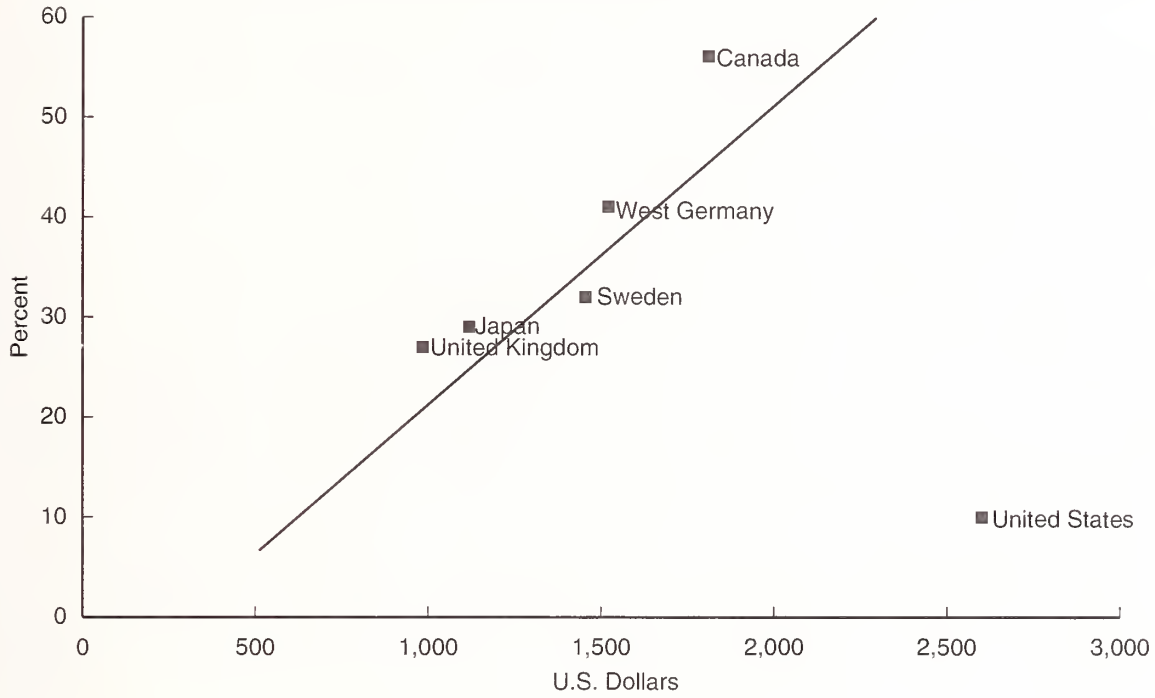
PROBLEMS DRIVING REFORM

Although both the level of spending and the growth in spending for health care in the United States far exceed those of any other country, it is difficult to assess what, if any, additional benefits Americans accrue. The United States ranks poorly in comparison with other developed countries according to common measures of health status such as infant mortality and life expectancy (Table 1-2).[1] U.S. health expenditures do not ensure continuous health insurance coverage for all Americans, as roughly one in seven is currently uninsured.

Views expressed in opinion polls and poor rankings in international comparisons reflect problems in the health system that decisionmakers in both the public and private sectors are

[1] A variety of factors beyond the quality of a country's health care and health care delivery system influence the results of these health status measures, however. Socioeconomic and cultural factors play a role, as does the extent to which a population is covered by health insurance.

Figure 1-1. Public Satisfaction and Per Capita Health Spending for the United States and Selected Countries, 1990



SOURCE: Blendon et al. 1990.

NOTE: Satisfaction measured as the percentage of respondents who agree with the following statement: "On the whole, the health care system works pretty well, and only minor changes are necessary to make it work better."

trying to address. Examination of the factors contributing to high spending, access problems, and concerns about the quality of care provides a context for considering various approaches to health system reform.

Health Spending Growth

At $2,868 per capita, the United States more than doubled the $1,305 health spending average of other developed countries in 1991, exceeding Canada, Japan, and Western European nations by 50 percent to nearly 200 percent. Even taking into account its high income levels, the United States devotes a much larger portion of its total national resources to health care than its peers. The United States spent $751.8 billion, or 13.2 percent of the gross domestic product (GDP), on health care in 1991. The average health spending-to-GDP ratio among industrialized nations in that year was 7.9 percent, with no other country spending more than 10 percent of GDP on health care (Figure 1-2) (Schieber et al. 1993).

Concerns have heightened over not only the level of health spending, but also the extent to which this level is increasing over time. The share of GDP consumed by health spending has grown from 5.9 percent in 1965 to an estimated 14.3 percent, $898 billion, in 1993. Unless

Table 1-2. Health Status Measures for the United States and Selected Countries

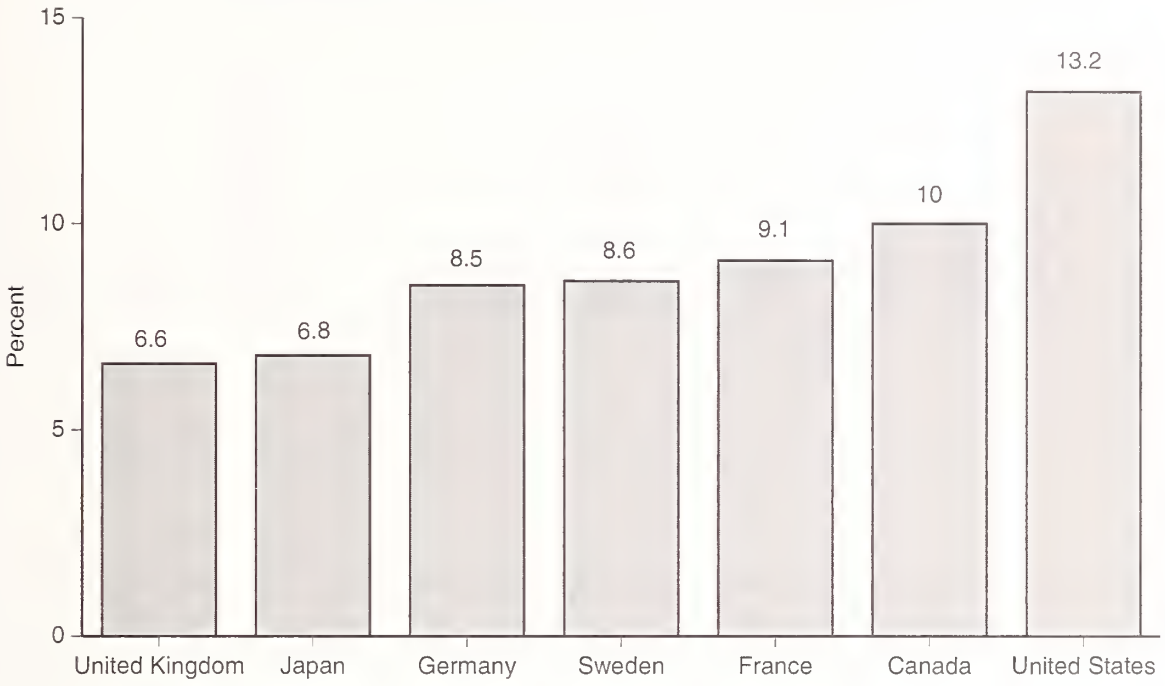
	United States	Canada	France	Germany[a]	Japan	United Kingdom
Vital Statistics						
Infant mortality rate[b]	9.2	6.8	7.3	7.0	4.6	7.9[c]
Low birthweight rate[d]	7.1	5.4	5.3	5.9	6.3	6.4
Life expectancy in years						
At birth						
Male	71.8	73.8	73.4	72.6	76.2	73.0
Female	78.8	81.1	81.8	79.2	82.1	78.7
At age 80						
Male	7.1	8.2	7.4	6.3	7.1	6.6
Female	9.0	11.0	9.5	8.0	8.9	8.5
Crude mortality rate[e]	850	710	920	1,110	670	1,120
Years of potential life lost before age 65[e]	5,801	4,648	5,072	4,507	3,334	4,412
Chronic Disease Death Rates[e]						
Cardiovascular disease[f]						
Male	487	387	258	504	238	539
Female	232	160	96	221	121	244
Lung cancer						
Male	74	73	68	73	45	96
Female	38	31	10	18	15	42
Preventive Health Practices						
Use of Pap test[g]	88	[h]	70	47	[h]	67
Use of mammogram[i]	25[j]	[h]	28	35	[h]	9
Childhood immunization rates[k]						
DTP	65	[h]	97	95	[h]	87
Polio	55	[h]	97	95	[h]	87
Measles	61	[h]	55	50	[h]	76

SOURCES: Infant mortality, life expectancy, and preventive health practices data from OTA 1993; low birthweight, crude mortality, and lung cancer data from OECD 1993; cardiovascular disease data from American Heart Association 1993; years of potential life lost data from CDC 1990.

[a] Based on data from the former Federal Republic of Germany.
[b] Deaths of infants below age one per 1,000 annual live births.
[c] Data from England and Wales.
[d] Percentage of all babies born at low birthweight.
[e] Per 100,000 population.
[f] Represents International Classification of Diseases, Ninth Revision codes 390-459.
[g] Percentage of women reporting ever having had a Pap test.
[h] Data not available.
[i] Percentage of women reporting ever having had a mammogram.
[j] Percentage of women reporting having had a mammogram within the preceding two years.
[k] Percentage of preschool children receiving immunizations.

NOTE: All data for most recent year available.

Figure 1-2. Total Health Expenditures as a Percentage of Gross Domestic Product for the United States and Selected Countries, 1991



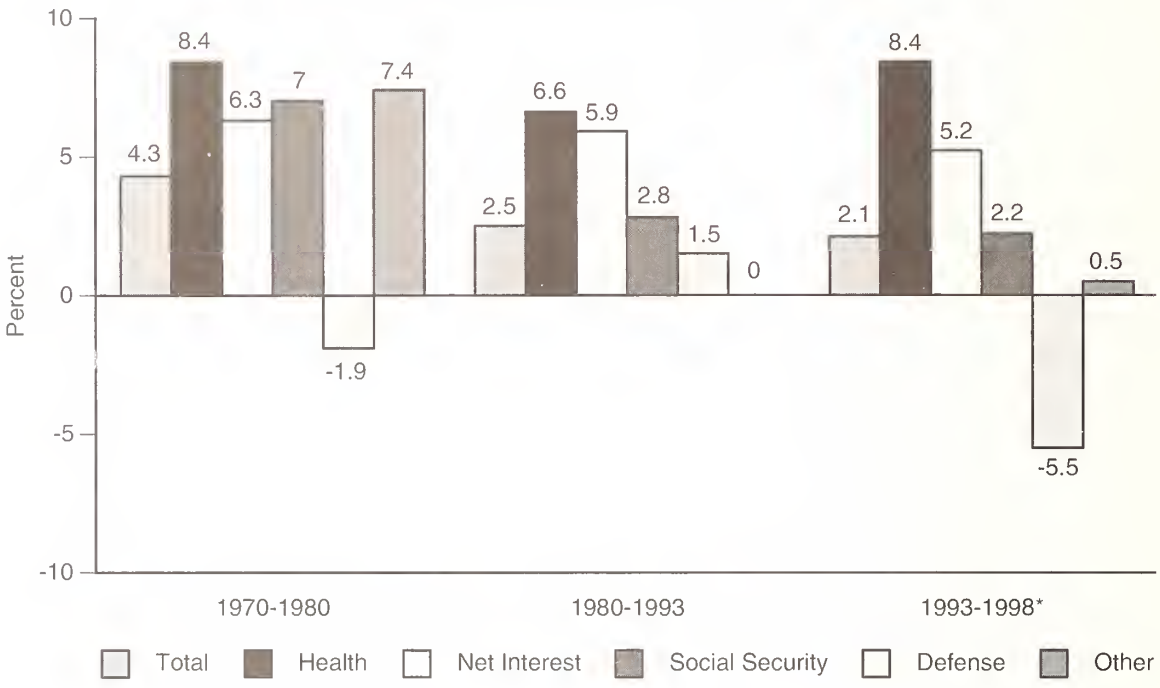
SOURCE: Schieber et al. 1993.

significant efforts are taken to curtail this growth, national health spending is projected to reach 18.2 percent of GDP in the year 2000 (CBO 1993a). This growth will come at the expense of resources that could be used for other purposes, such as housing, education, transportation, and defense. For example, federal health expenditures are projected to grow over the next four years at a rate notably higher than the 1980-1993 growth rate, while the rates of growth in federal outlays for other national priorities are expected to decline (Figure 1-3).

Although national health spending continues to grow, some slowing in the rate of growth has occurred recently. In contrast with a spending increase of 11.4 percent in 1991, spending in 1992 and 1993 is estimated to have grown at the slower rates of 9.4 and 9.1 percent, respectively (CBO 1993b). Some question whether this reflects real changes in the market or is just a temporary aberration.

Nearly 90 percent of national health spending represents personal health expenditures, a category that includes all spending directly related to patient care. Because total personal health expenditures equal the product of the prices paid for services and the quantities of services provided, growth in spending can result from increases in those prices and in the number of services or changes in the mix of services furnished to patients. The following sections examine the factors that contribute to the growth in personal health expenditures.

Figure 1-3. Average Annual Growth Rates of Real Federal Outlays, Selected Components, Fiscal Year 1970-1998 (percentage)



SOURCE: CBO 1993b.

*Based on Congressional Budget Office projections.

NOTE: Real outlays are in 1991 dollars. Health care outlays exclude those in the Department of Defense.

Price. During the 1980-1990 period, the consumer price index (CPI) for medical care increased at an average of 8.1 percent per year. This was a higher rate of growth than that of the overall CPI, which rose at an average annual rate of 4.5 percent. The difference suggests that, over the course of the decade, medical prices substantially outpaced general inflation. Two factors, however, make it difficult to evaluate the effect of medical price increases on personal health spending.

First is the issue of measurement. The medical care CPI tends to overstate price growth because it fails to account for improvements in quality that affect prices. It also reflects usual charges rather than the discounted fees providers actually receive (CBO 1992). In addition, the weighting of physician and hospital spending in the formula used to calculate the medical care CPI reflects consumer out-of-pocket spending rather than payments by all purchasers.

Second, changes in the manner of billing for medical services, such as upcoding and unbundling, may also contribute to the growth in the price component of expenditures.[2] The magnitude of these changes in billing practices and whether they have been increasing over time is unclear. Because neither of these billing practices is reflected in the CPI, this portion of expenditure growth due to price is generally included in the estimate of volume.

Increasing Volume and Intensity. Most growth in volume consists of increases in the complexity of services provided and in the number of services provided per episode of medical contact, such as per hospital day or physician visit. When these factors, along with growth in medical prices above inflation, are combined into the single component of "other price and intensity," they account for 50 percent of the growth in personal health spending from 1990 to 1993 (Figure 1-4). By contrast, increases in the number of medical contacts per person have had only a modest effect on spending increases; this component accounted for 5 percent of the growth in personal health spending in the past three years (CBO 1993a).

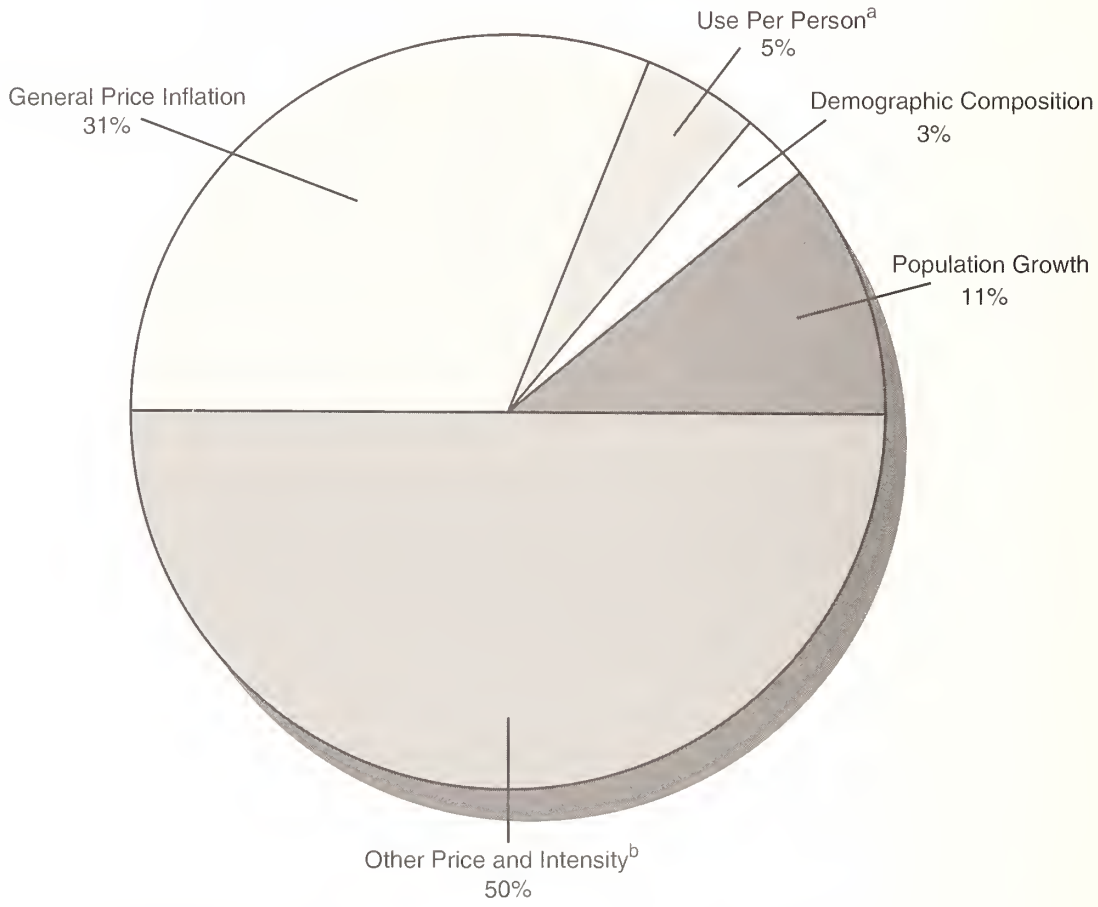
Limitations of the CPI described above do not permit its use in estimating the role increased volume has played in rising personal health expenditures. Because Medicare price information is more reliable, however, data from the Medicare program permit more accurate assessment of volume increases. Between 1986 and 1992, the volume of services per Medicare enrollee rose by 47 percent, or at an average rate exceeding 6.7 percent per year. If this rate of increase continues, enrollees, on average, will receive twice as much medical care at the turn of the century as they did in 1990. Of course, the experience of Medicare beneficiaries, who are elderly or disabled, is not representative of the entire population, but data from the Blue Cross and Blue Shield Association suggest that volume growth has been at least as rapid for its privately insured population (PPRC 1993a).

Factors Contributing to Volume and Intensity Growth. Increases in the volume of services can be separated into two components: those due to growth and aging of the population, and those due to changes in the practice of medicine. A larger population means that there is an increased number of health care consumers, while an aging population may require both more services and services of a greater intensity. While these factors augment rising medical expenditures, they play a relatively minor role; population growth accounted for 11 percent, and aging accounted for just 3 percent of the growth in personal health care expenditures from 1990 to 1993 (CBO 1993a).

A number of factors have encouraged less efficient practice patterns and contributed to the growth in personal health spending. Uncertainty in medicine leads to the provision of services that may not be necessary or appropriate. This uncertainty is exacerbated by incentives of the

[2] Upcoding refers to the practice of using a code with a higher allowed charge to describe a particular service. Unbundling describes billing for each component service separately, when the alternative is to bill for a global package that may entail a lower charge. Some unbundling and upcoding is inadvertent, and may reflect the ambiguity of codes or billing conventions in a particular area.

Figure 1-4. Factors Accounting for Growth in Personal Health Spending, 1990-1993



SOURCE: CBO 1993a.

[a]Consists of basic medical contacts, such as days in the hospital or physician visits.

[b]Includes price increases in excess of the gross domestic product deflator, additional volume of services per medical contact, and increases in the complexity of services.

NOTE: Based on Congressional Budget Office projections.

malpractice system and the fee-for-service payment system that encourage the provision of services beyond what is clearly indicated. Moreover, while elementary economics would predict that the quantity of services demanded will decline when prices increase, the presence of third-party payment has insulated patients from the cost of care prescribed. Because patients do not directly bear full treatment costs and because few have the specialized training necessary to interpret medical information for themselves, patients rely heavily on the advice of the professionals who provide their care in making treatment choices.

Inadequate constraints on resources also contributes to increased spending. For example, there is currently no national policy with regard to the training of physicians or the

development and dissemination of technology. Without constraints, technological change and an increasing physician supply can raise spending substantially, as the payment system absorbs the costs and insulates patients and physicians from the effects of their clinical decisions.

The introduction of new technologies and treatments that substitute for less expensive services or result in the provision of more care play a significant role in increasing costs. The United States uses a more intensive approach to treatment than other developed countries. This approach is reflected in the rapid integration of new technology into medical practice and by the fact that while the United States has fewer physician contacts, fewer hospital beds, and a shorter length of stay, its expenditures are much higher than others' (Schieber et al. 1993).

An increasing number of physicians may also contribute to rising costs. Between 1970 and 1990, the number of physicians per capita climbed by more than 50 percent. Because physicians appear to have considerable ability to affect demand for their services, a growing supply of physicians can drive up the volume of services provided without reducing prices. A surplus of physicians may increase the incidence of unnecessary care and the probability that physicians will practice outside their area of competence, thereby elevating health care costs (Ginzberg 1983; Grumbach and Lee 1991; Schroeder 1984).

Another factor that appears to contribute to expenditure growth is the increasing specialization of physicians. The proportion of the physician work force in medical subspecialties (such as cardiology and gastroenterology) doubled between 1970 and 1990. This trend may contribute to rising expenditures because care provided by specialists is more intensive and expensive than that provided by generalists (Greenfield et al. 1992).

Access Problems

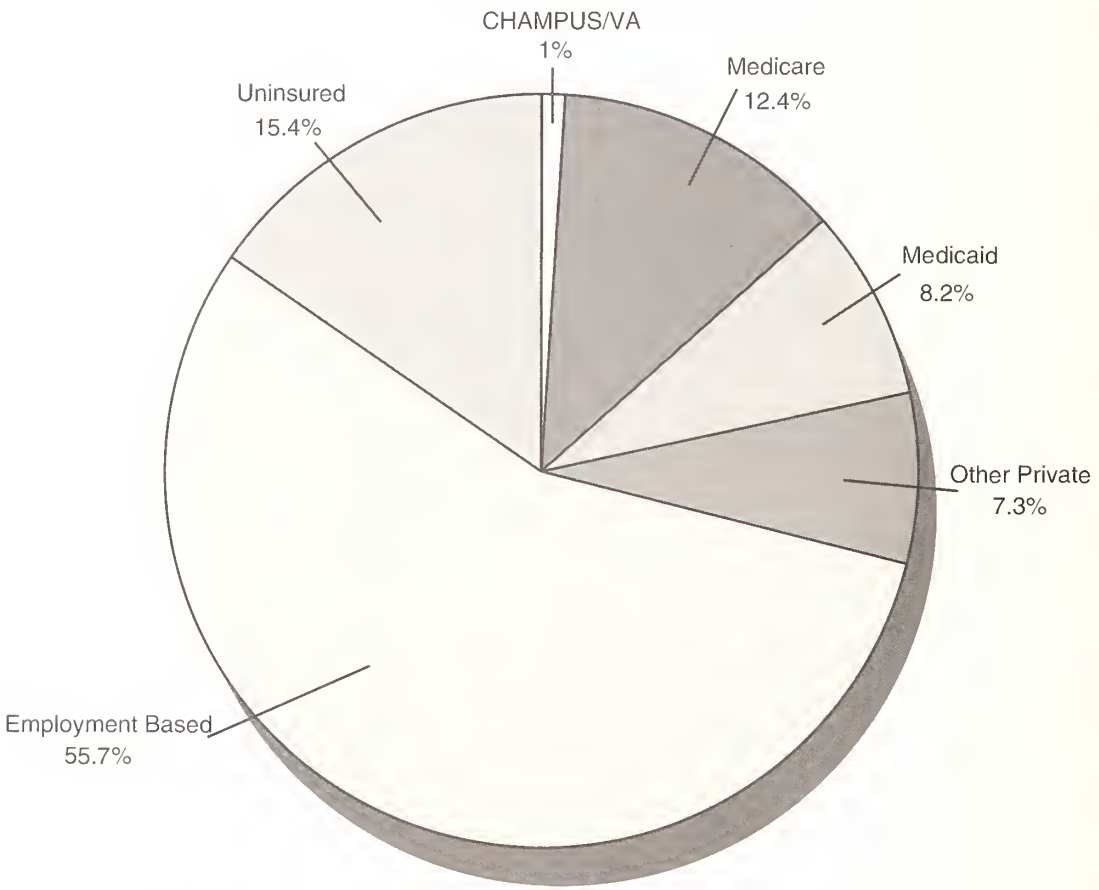
The concept of access encompasses those factors that are related to a population's ability to enter the health care system when care is needed. The value Americans place on access is reflected in the Medicare and Medicaid programs, both of which were created to ensure access for vulnerable populations otherwise likely to experience difficulty obtaining care. Access is important not only for reasons of equity, but also because treatment delayed or delivered in an inappropriate setting may drive up overall health care costs and lead to worse patient outcomes.

Access problems are the greatest among those who lack health insurance, although there are many among the insured who also face difficulty obtaining needed services. An estimated 38.9 million Americans, or 15.4 percent of the population, were without any form of health insurance coverage in

1992 (EBRI 1994).[3] While the lack of health insurance is the primary obstacle to obtaining medical treatment, particularly for those with low incomes, the location of providers, cultural differences, and other financial barriers cause access problems among both the insured and uninsured.

Most Americans obtain health insurance through their employers, although public insurance is provided for some vulnerable groups (Figure 1-5). Due primarily to the success of the Medicare program in covering the elderly, only one percent of elderly Americans lack health insurance. About half of the impoverished obtain coverage through the joint federal-state Medicaid program, as do those who qualify as medically needy (EBRI 1994; CRS 1993).

Figure 1-5. Primary Source of Health Insurance Coverage for Americans, 1992



SOURCE: EBRI 1994.

[3] This estimate is based on EBRI analysis of the March 1993 Current Population Survey, which questions individuals about their health insurance coverage throughout the preceding calendar year. Respondents to the 1993 survey were instructed to provide information about their health insurance coverage during 1992. Assuming accurate responses were given, the uninsured should include only those individuals who were without insurance for an entire 12 months. Many researchers believe that the majority of respondents actually answer the health insurance questions with reference to either a particular point in time or to some period less than a full year, however.

Lack of Insurance as a Barrier to Access. Those who lack insurance can be described according to their distribution across categories, or by the proportion of those in a given population category that is uninsured. Table 1-3 describes the nonelderly uninsured population in both of those ways.[4] For example, 19.4 percent of those who lack insurance are Hispanic. Yet of the Hispanic population, 35.1 percent, or more than a third, are uninsured. In comparison, while whites comprise 58.5 percent of the uninsured population, just 13.9

Table 1-3. Uninsured Under Age 65, by Age, Race/Ethnicity, Poverty Level, and Family Type, 1992

	Total Population (millions)	Total Uninsured (millions)	Percentage of Uninsured Population	Percentage of Population Category that is Uninsured
Age				
5 and under	23.3	3.1	8.1	13.3
6-12	25.8	3.8	9.9	14.7
13-17	17.1	2.9	7.5	17.0
18-24	23.9	7.0	18.2	29.3
25-29	19.2	4.6	11.9	24.0
30-44	61.8	10.4	27.0	16.8
45-64	49.6	6.7	17.4	13.5
Race/Ethnicity				
White	162.4	22.6	58.5	13.9
African American	28.5	6.6	17.1	23.1
Hispanic	21.4	7.5	19.4	35.1
Other	8.5	1.9	4.9	22.0
Percentage of Poverty Level				
0-99	33.0	10.8	28.0	32.7
100-149	19.4	6.9	17.9	35.6
150-199	20.2	5.6	14.5	27.7
200+	148.2	15.3	39.6	10.3
Family Type				
Married with children	100.9	13.5	35.0	13.4
Married without children	51.3	7.8	20.3	15.2
Single with children	29.9	6.1	15.8	20.3
Single without children	38.7	11.2	29.0	28.9
Total	220.8	38.5	*	17.4

SOURCE: EBRI 1994.

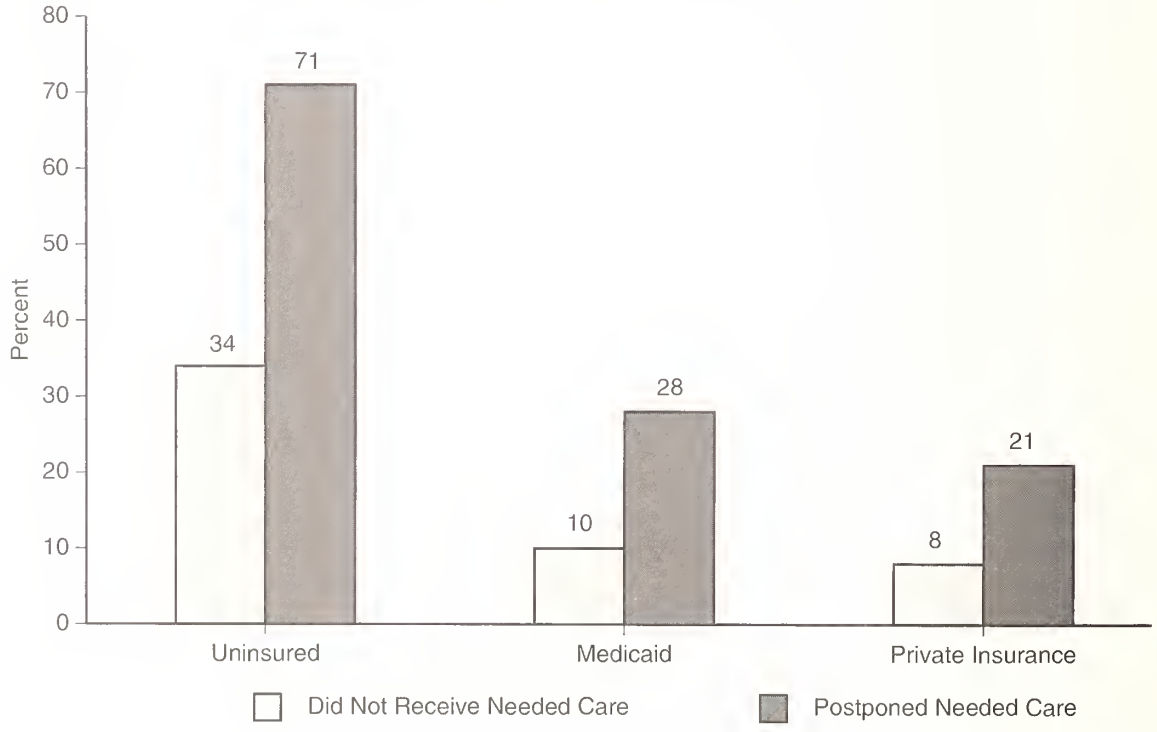
* Percentages in each category may not total 100 due to rounding.

[4] Because the elderly constitute only one percent of the total uninsured population, the focus in policy discussions often centers on the nonelderly uninsured population.

percent of white Americans lack insurance. Children constitute one-quarter of the uninsured population, although in terms of age categories, young adults between the ages of 18 and 24 have the highest proportion of uninsured with 29.3 percent. In terms of income, most likely to be uninsured are the so-called working poor—families whose incomes are too high to qualify for Medicaid coverage, but not high enough to afford private health insurance (EBRI 1994; CRS 1993).

The consequences of being uninsured include the utilization of fewer health services and the attainment of poorer health outcomes than the insured population. Nationwide, 34 percent of uninsured Americans fail to obtain needed care, compared with just 8 percent of those with private insurance (Figure 1-6) (Kaiser Family Foundation and Commonwealth Fund 1993). When they do receive medical treatment, the uninsured face lower survival rates, higher in-hospital mortality rates, and poorer birth outcomes than the insured population (Braveman et al. 1989; Hadley et al. 1991; Ayanian et al. 1993).

Figure 1-6. Persons Reporting They Postponed or Did Not Receive Needed Care, by Insurance Status, 1993 (percentage)



SOURCE: Kaiser Family Foundation and Commonwealth Fund 1993.

The uninsured also differ from the insured in the sources and types of care they obtain and in the timeliness of their treatment. Those without insurance rely on hospital outpatient departments, emergency rooms, and community health clinics for a substantial portion of the care they receive. The tendency of the uninsured to lack a steady source of medical care is problematic in that less stable arrangements do not foster continuity in treatment. Delays in treatment are also more common among the uninsured; while 71 percent of the uninsured postpone obtaining needed care, only 21 percent of the privately insured report doing so (Kaiser Family Foundation and Commonwealth Fund 1993). Such delays result in medical conditions that have become more serious and costly to treat by the time medical attention is procured.

Other Barriers. While lack of health insurance is the greatest barrier to obtaining medical care, especially for those unable to afford treatment, insurance coverage alone is insufficient to ensure access. Those whose insurance is inadequate, either in terms of scope of coverage or payment levels, are at risk of access problems, as are those made vulnerable by cultural or social factors.

First, many Americans are inadequately insured, and thus may be subject to some of the same access problems faced by those who lack insurance. Millions of Americans stand at considerable medical and financial risk because their health insurance policies cap the total spending an insured person can incur. Many others hold health insurance policies that may inhibit them from seeking preventive medical care or early intervention for medical problems by providing coverage only in the event of a catastrophic illness or for extended hospital stays. In addition, some have policies that do not cover the treatment of a medical condition that existed prior to their obtaining coverage.

Second, some Medicaid and Medicare beneficiaries face access problems despite the relatively comprehensive nature of their benefits. While Medicaid has been successful in improving access for the previously uninsured poor, Medicaid beneficiaries do not enjoy access to the same sites of care as other patients. Because low physician payment levels lead many physicians to favor Medicare beneficiaries and those with private insurance, Medicaid beneficiaries are more likely than those with other types of insurance to seek care outside the physician's office. For example, 13.5 percent of Medicaid beneficiaries report that a hospital outpatient department or emergency room is their usual source of care, compared with only 4.8 percent of those who are privately insured (AHCPR 1991). Although Medicare beneficiaries may be more attractive to physicians than those covered by Medicaid, vulnerable segments of the Medicare population also experience access problems. The Commission has found that African American beneficiaries and beneficiaries living in both urban poverty areas and urban Health Professional Shortage Areas have poorer access to care than other Medicare beneficiaries (PPRC 1993b).

The lack of health care providers in many rural and inner-city areas also creates difficulties in obtaining care for both insured and uninsured persons living in these areas. This reflects the

preferences of health professionals to practice in a secure and professional working environment where most patients have insurance. Medical facilities and equipment may also be lacking, particularly in rural areas, and existing medical care facilities may be inconvenient in terms of location and hours of operation. Providers that are available in these areas are often strapped for resources or do not represent the most appropriate entry points into the health care system.

Finally, there are additional factors that may present obstacles to receiving treatment. Language barriers make it difficult to get appointments and communicate with medical providers. Differences in cultural background affect the willingness to seek treatment and the effectiveness of patient and provider interactions. Race has also been found to affect access to care and influence decisions about medical treatment. Furthermore, services that enable persons to obtain care (such as child care and transportation) are often lacking for those who most need them.

Ensuring Quality

Concerns about the quality of care stem first from the desire to ensure good patient care, although increasingly interest has centered on the relationship between quality and cost containment. This focus is on predicting how improvements in quality can contribute to cost savings and how quality might be adversely affected by efforts to control costs.

Besides the technical quality in delivery of a particular service, the other fundamental determinant of quality of care is the appropriateness of that service in a specific treatment situation. There is growing concern that a substantial proportion of patients may be receiving care that is of little or no benefit to them, while others are not receiving care known to be effective. The most recent studies assessing the appropriateness of selected procedures have estimated that between 2 percent and 21 percent of procedures performed are inappropriate and that an additional percentage falls into a gray area of uncertainty (Bernstein et al. 1993a; Bernstein et al. 1993b; Hilborne et al. 1993; Leape et al. 1993).

Uncertainty about what approaches work best and how care can be provided most efficiently has led to patterns and organization of medical practice that vary widely across the country. New and increasingly complex and expensive methods of diagnosis and treatment are continuously being introduced. The rapid development and diffusion of new technology may place physicians in the position of making clinical decisions without complete knowledge of the efficacy and cost-effectiveness of specific procedures under particular conditions.

The financial incentives faced by hospitals, groups of physicians, and individual physicians may also affect the quality of care. The fee-for-service payment system encourages the provision of services beyond what is clearly indicated. The malpractice system provides similar incentives, leading some providers to use more tests and precautionary procedures than would otherwise seem necessary, in order to lessen the perceived risk of a malpractice

claim. Parallel concerns focus on the incentives faced by providers in capitated health care delivery systems, in that the savings they produce may represent the provision of fewer needed services along with the elimination of redundant or inappropriate care.

In response to these challenges to quality, the state of the art in quality assurance has been changing rapidly and efforts to develop a variety of new approaches are under way. The increasing role of managed care and tension between cost containment and quality improvement have intensified efforts to improve methods to assess outcomes, effectiveness, and appropriateness. The federal government has led efforts to develop the knowledge base needed to reduce uncertainty. In 1989, the Congress created the Agency for Health Care Policy and Research (AHCPR), with one of its priorities being development of information on the outcomes and effectiveness of services. The AHCPR and other organizations in both the public and private sector also employ the technique of technology assessment, a process of evaluating the efficacy, effectiveness, or cost effectiveness of a medical technology. Current efforts are constrained, however, by the lack of adequate administrative and clinical databases necessary to support the work.

The challenge is to develop methods of integrating the information uncovered through these research efforts into consumer and provider decisions, which range from whether a particular service is warranted to which health plan to choose. The first step toward integrating the findings of outcomes and effectiveness research into provider behavior is translating this information into tools for practitioners to use to make better clinical and treatment decisions. Parties in both the public and private sectors have become actively involved in the generation of practice guidelines that build on the findings of this research. The potential of practice guidelines to influence provider behavior may not be fully reached, however, without development of an infrastructure that both supports and provides incentives for improvements in medical practice.

In that vein, there has been a growing interest in finding ways to ensure quality and control costs in a manner that is less intrusive to physicians and perhaps more effective in raising the general standard of care. Until recently, the general approach to quality assurance involved identifying specific instances of inappropriate care and penalizing the provider responsible. This approach, typified by retrospective review of provider treatment decisions, imposes significant costs on physicians in terms of staff resources, time, and loss of autonomy. While this approach still predominates, others may offer a less intrusive way to alert physicians to potential quality problems and to improve the quality of care. Practice profiling, for example, an epidemiologic technique that focuses on patterns of care rather than on individual treatment decisions, uses information obtained from large databases to identify a provider's pattern of practice and compare it with those of similar providers or with an accepted standard of care. The information obtained through practice profiling may be used to assess provider performance or as a benchmark in continuous quality improvement.

Purchasers have responded to rising health care costs by looking for ways to obtain information about the performance of providers or health plans that can be used in making selections among them. Large employers increasingly look for proof of quality, efficiency, and value in the plans with which they contract, and seek to hold these plans accountable for their performance. In turn, plans seek to demonstrate their achievements in these areas as a marketing tool. Mechanisms designed to measure the quality of care provided in an organized delivery system and report this information to purchasers, such as the Health Plan Employer Data and Information Set, have attracted much interest as demand for comparable quality information increases.

Managed-care delivery systems have been slow to penetrate Medicare and Medicaid beneficiary markets in part because of policymakers' fear of inadequate quality safeguards. Recent advances in methods to ensure quality, however, facilitate more direct maintenance of quality standards. Recognizing the potential of these advances, the Health Care Financing Administration recently developed the Health Care Quality Improvement System (HCQIS), a quality assurance system for Medicaid risk-based managed care. The HCQIS is currently being tested through a series of demonstration projects. If successful, this system may alleviate concerns about the ability to monitor and ensure the quality of care provided to Medicare and Medicaid beneficiaries in managed care, and may pave the way to more effective quality assurance systemwide.

FORGING COMPREHENSIVE REFORM

Because problems in the health system are interrelated, efforts to address one may be hindered by the persistence of other problems or may have unintended systemwide effects. Recognition of the interrelationships of health system problems has led many policymakers to support comprehensive reform both to restructure the financing and delivery of health services and to reshape policies in complementary areas such as physician training, technology assessment, and medical malpractice.

Approaches to Cost Containment

Many policymakers see the need for cost containment as the primary issue driving health system reform. Achieving other policy goals, such as improved access, will be difficult if health care costs continue to increase more rapidly than growth in the economy as a whole.

Although reform proponents generally agree on the causes of the cost problem and the importance of developing a knowledge base and tools to aid providers in providing appropriate care, they differ on the mechanisms to control price and to induce physicians to practice more effectively and efficiently. Discussion of cost containment has focused on the two distinct strategies—rate setting and managed competition—that are reflected in legislative proposals for health system reform. This section provides a generic description of these approaches.

Rate Setting. Under the rate-setting strategy, cost containment is driven by public decisions on the rates of payment for medical services. The rate-setting approach offers two policy levers to control spending growth: reducing prices for individual services or basing payments on a unit that is broader than the individual service (such as payment per hospital admission). Using these levers, cost containment could be achieved by setting payment rates lower than current ones or allowing them to increase more slowly.

Expanding the basis for payment beyond the individual service level creates incentives for providers to economize on the quantity of services delivered. Hospitals, for example, can respond to these incentives by limiting lengths of stay and reducing the number of tests and procedures delivered during the stay. In the case of physician payment, however, the more limited use of bundled payment provides fewer opportunities for rate setting to induce economizing. Most physicians' services are currently paid on a fee-for-service basis.[5] When payment rates are constrained under fee for service, the experience in the Medicare program—as well as in Canada and Germany—has been that the quantity of services billed increases to offset a portion of the reduction in payment rates (Barer et al. 1988; Kirkman-Liff 1990).

Under the rate-setting strategy, decisions regarding annual increases in payment rates could be linked to decisions about what proportion of national resources should be devoted to health care. Budget goals could be met through the use of expenditure targets—goals for spending that would be set for a given year. Future updates in payment rates would be determined by how actual expenditures compared to the target. Although payment rates could be set to limit aggregate spending to a particular target, setting them too low could compromise access or quality. In the short run, however, opportunities likely exist to constrain payment rates significantly without risking these sacrifices.

Over time, the degree of constraint on service prices that is practically achievable may well be inadequate by itself to meet society's goals for cost containment. Trends of increasing volume of medical services per capita—reflecting changes in medical practice—suggest that slowing this growth is a critical component for stabilizing health spending. Thus, at least for the long term, the rate-setting strategy must also include development of an infrastructure to support improvements in medical practice and other policies to impede unwarranted growth in volume.

Managed Competition. Under the managed-competition strategy, cost containment is addressed primarily through organized systems of care and steps to make health insurance

[5] An important exception is the global fee for surgery. This longstanding practice of payment, which covers not only the operation but defined preoperative and postoperative care, provides surgeons with incentives to economize on these services. Other bundled payments, such as one covering all physicians' services provided during an inpatient stay, one covering all services associated with a visit, or one covering an episode of care, have been widely discussed. With further development, one or more of these could be incorporated into a rate-setting system. Use of capitation payments for primary care or certain specialty services has been increasing, but mainly in the context of certain managed-care plans.

markets more functional. Organized systems of care, which provide comprehensive health care under contract to consumers, are characterized by the integration of financing and delivery, the use of select panels of providers, and accountability on the basis of information on cost and quality. Some of today's health maintenance organizations are viewed as models of these plans.

More functional markets for health insurance could ensure that health plans are more reliably rewarded for good performance and penalized for poor performance. Although examples of successful organized systems of care exist, their lack of dominance in the health care system results in part from the failure of markets for health insurance. Consumers lack the information necessary to make wise choices among health plans and do not have financial incentives to favor more efficient plans. Health plans, on the other hand, may find higher financial rewards in selecting enrollees with lower medical needs than in providing care more efficiently.

Proponents of the managed-competition strategy suggest a variety of reforms that could be undertaken to create more functional markets. First, local boards could be created to manage the rules of the game in the marketplace. They would certify health plans, establish plan marketing rules, collect community-rated premiums from employers or consumers, and make payments to health plans that are adjusted for the projected health care needs of plan enrollees.[6,7] Alternatively, government could perform these functions. Second, the benefit package could be standardized by the federal government in order to facilitate consumer choice of plans and to prevent plans from attempting to attract healthier-than-average enrollees by offering a benefit structure that might appeal only to that segment of the population. Finally, consumer demand for value could be increased by tying out-of-pocket premium costs to the relative expense of a health plan. Under such a market structure, health plans would face strong incentives to contain costs and improve quality.

An important difference among managed-competition proposals concerns the regulation of insurance premiums. Proponents of pure versions of the managed-competition strategy believe there is no need to regulate premiums. They reason that if consumers were to choose among health plans and pay with their own after-tax funds, the correct allocation of resources between health care and other goods and services would be made by the market. Other proponents, noting that managed-competition strategies remain, for the most part, untested, have less confidence in the outcome and would regulate premiums to ensure that cost-containment goals are met.

[6] Some managed-competition proposals assign the local board a much more active role. Its activities could also include selection of a limited number of plans to compete in an area on the basis of a request for proposals, negotiation with plans over premiums, and sponsorship of community-level activities to improve the delivery of health care.

[7] The local board would make payments to health plans on a risk-adjusted basis. This means that the effects of risk selection (favorable or unfavorable for any plan) are removed from payments made by consumers, regardless of the plan they choose. The plans would receive different amounts depending on the local board's assessment of enrollees' risk of requiring more-or-less-than average amounts of medical care.

Proposed Health System Reform Strategies

Numerous proposals for reforming the health system have been introduced, representing a spectrum of approaches. The range of proposals in today's debate looks surprisingly similar to those being considered 20 years ago. Somers and Somers (1972) described a similar array of options, including their ideas for reform that closely resemble today's proposals for managed competition. While the Congress has not yet enacted any of the proposals before it, it is currently engaged in serious debate over several alternatives.

These proposals can be differentiated according to at least three dimensions relevant to the Commission's work: the approaches used to contain costs, improve access, and ensure the quality of care. In addition to differences in approach, each proposal also differs in level of specificity. The following is an overview of some of the approaches used.

Cost Containment. Each proposal would achieve the goal of cost containment through reliance on a rate-setting strategy, market forces, or some combination of the two approaches. While each proposal seeks to reduce the growth rate of federal health programs through explicit regulatory mechanisms, only some would extend similar cost-containment measures to the private sector.

Some proposals give policymakers a lever to determine how much is spent nationally on health care. These proposals rely on rate setting or premium regulation to control the growth of private spending. For example, two of the proposals would establish fee schedules for fee-for-service transactions between providers and public and private payers. One proposal would assign each designated geographic region a separate premium cap. Enforcement of the budget would occur under this proposal through a federally administered formula that dictates plan-specific premium reductions when the area exceeds the targeted rate of growth.

Some reform proposals rely primarily on competition in a restructured market to hold down costs. Several call for the formation of purchasing cooperatives with some ability to coordinate or influence insurance activity in their local market area. For example, purchasing cooperatives in some proposals would provide consumers with information that facilitates comparison among competing health plans. These cooperatives would monitor plans' marketing strategies and reduce incentives to seek healthy patients by adjusting premiums for risk factors.

Each proposal calls for complementary policies: those that are designed to address other policy goals but are also likely to have cost-reducing effects. For example, several proposals call for medical malpractice reform and claims processing standardization. Some proposals would also restructure the financing of graduate medical education to constrain the number of residency positions and to favor generalist training. Others would create mechanisms to support additional outcomes research and practice guidelines to give providers more information to use in making clinical decisions.

Improving Access. With respect to access, the proposals can be divided into two types: those that would mandate universal health insurance coverage, and those that would provide incentives and subsidies to increase coverage. Among the former, some would provide coverage to everyone at enactment, while others would extend coverage gradually, as funding (usually savings from federal programs and increased tax revenue from cost savings to employers and employees) became available. While some proposals that mandate universal coverage would require all employers to pay a portion of their employees' premium costs, others would make individuals responsible for obtaining coverage. One proposal would facilitate individual purchase of health insurance, but would require states to insure those individuals who did not voluntarily obtain coverage. Under this proposal, states would be permitted to charge an insurance premium based on the cost of coverage and an individual's ability to pay.

Proposals that do not commit to universal coverage would rely on market-based mechanisms to help as many people as possible obtain insurance. For example, some proposals advocate changes in tax law to encourage individuals to create medical savings accounts to cover health costs. One proposal would encourage more employers to provide health insurance benefits by changing laws to facilitate the formation of multiple-employer groups. These groups could collectively purchase health insurance and negotiate lower premiums. Another proposal creates a tax incentive for individuals to purchase insurance by making the premium cost and unreimbursed health expenses partially tax deductible.

Several proposals would take additional steps to improve access for populations facing barriers to care beyond insurance status. For example, some contain provisions to meet the needs of vulnerable populations by establishing grants for primary care centers in underserved areas or expanding funding for migrant and community health centers. Others include the expansion of financial incentives for providers to practice in underserved areas.

Quality Assurance. Recognizing that cost savings may come at the expense of quality, each of the proposed reform strategies provides mechanisms for quality monitoring. Several proposals would also allocate additional federal funding for research efforts to expand the knowledge base and tools needed to provide appropriate care.

The extent to which quality performance information is collected and released about specific plans and providers varies among the reform proposals. One proposal, for example, calls for plan-specific reports that outline how each plan performed in reference to a set of designated quality measures. Consumers would have access to the information and could, in theory, use it to make better choices about which plan to join. Other proposals would collect data on expenditures, services rendered, and outcomes, but would use the findings to identify problem areas rather than to enhance consumer information. Another common feature of reform proposals is a requirement that health plans obtain (typically, state) government certification, often contingent on establishing and maintaining a satisfactory quality assurance program.

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PART I

REFORMING THE HEALTH SYSTEM:

COST, QUALITY, AND ACCESS

CHAPTER 2

COST CONTAINMENT AND EXPENDITURE LIMITS

As the Congress considers options for health system reform, the opportunity to expand access and maintain an affordable, high-quality health system depends on designing policies that will result in effective cost containment. The Commission strongly supports reining in costs because of the effects that rising health costs have on both private and public spending.

The high cost of health care threatens the ability of both individuals and society to pay for needed health services and reduces their ability to direct resources to other priorities. For some people, these costs have historically made health care unaffordable and denied them access to needed services. For others, rising costs threaten to reduce the access they now have. Successful cost containment, by contrast, will make care more affordable and thus improve the nation's ability to expand access for vulnerable populations.

Escalating costs also place stress on federal and state budgets. According to the Congressional Budget Office (CBO), health care over the past decade has been the fastest-growing major component of government budgets, and mounting costs for Medicare and Medicaid will mean larger federal budget deficits unless offset by tax increases or spending cuts for other programs (Reischauer 1993b). State budgets are equally at risk for the rising costs of Medicaid and other state health programs. Between 1975 and 1991, state spending on Medicaid rose at about 12 percent per year, with a few states averaging as much as 20 percent annual growth in that period (CRS 1993).

RECOMMENDATIONS

Cost containment should be achieved by a combination of market mechanisms and expenditure limits. This combination would minimize the impact of failure of either and leave the system in a position to emphasize the more successful approach.

Regardless of the emphasis on market mechanisms or expenditure limits to achieve cost-containment goals, the Congress should enact complementary initiatives (e.g., controlling the supply of physicians, medical malpractice reform, and a national data strategy to improve and monitor system performance) that can play an integral role in constraining costs.

This chapter examines several critical macro-level policy issues related to cost containment under two major themes. The first section looks at the goals the country might want to adopt for controlling costs, including both long-term spending goals and short-term pathways toward those

goals. The second section considers the means available for achieving these goals, describing how a balance might be achieved between market mechanisms and expenditure limits and between the roles of premium limits and rate setting in enforcing expenditure limits. This chapter sets the overall direction for the four chapters that follow. They look in far more depth at issues surrounding setting premium limits for plans, setting payment rates for providers, setting expenditure limits for states and substate regions, and structuring the health insurance market.

GOALS FOR COST CONTAINMENT

As reforms take effect, different goals for the growth of health spending may be desirable over different time frames. Thus, it may be appropriate to delineate separate standards for spending growth in the short and long terms, and the Commission has studied both. This discussion is cast broadly in terms of setting goals for health system reform, however designed. As such, it is relevant for proposals that adopt enforceable expenditure limits. But it is also relevant to those that would use standards only as goals against which to measure the success of competition, as well as to those that would use them as triggers for some type of standby expenditure limits.

Setting Spending Goals for the Long Term

The critical issue on which the success of cost containment will eventually be judged is the long-term growth rate of spending relative to growth of the gross domestic product (GDP). Current projections by the Congressional Budget Office show that health spending, at 14 percent of GDP in 1993, will exceed 20 percent of GDP in only 10 years (CBO 1993). The dilemma for policymakers is illustrated by the projection of one economist that between 1988 and 1998, increased health spending will capture 76 percent of the growth in national income per person (Steuerle 1994).

The Commission has concluded previously that, if expenditure limits are adopted, an overall goal should be established that links spending growth to the growth rate of the gross domestic product (PPRC 1993). This statement, however, did not set GDP growth as the exact goal for health spending growth and left open the possibility of setting the latter rate somewhat higher or lower.

This GDP benchmark, which would set a goal of about 4.2 percent nominal growth per person per year (or about 1.7 percent real growth), is generally defended on the grounds of affordability.[1] By this argument, the nation can afford to spend a constant share of its resources on health. To spend a growing share—as it does today—is to channel a higher proportion of growth into health rather than other sectors of the economy. Given that the

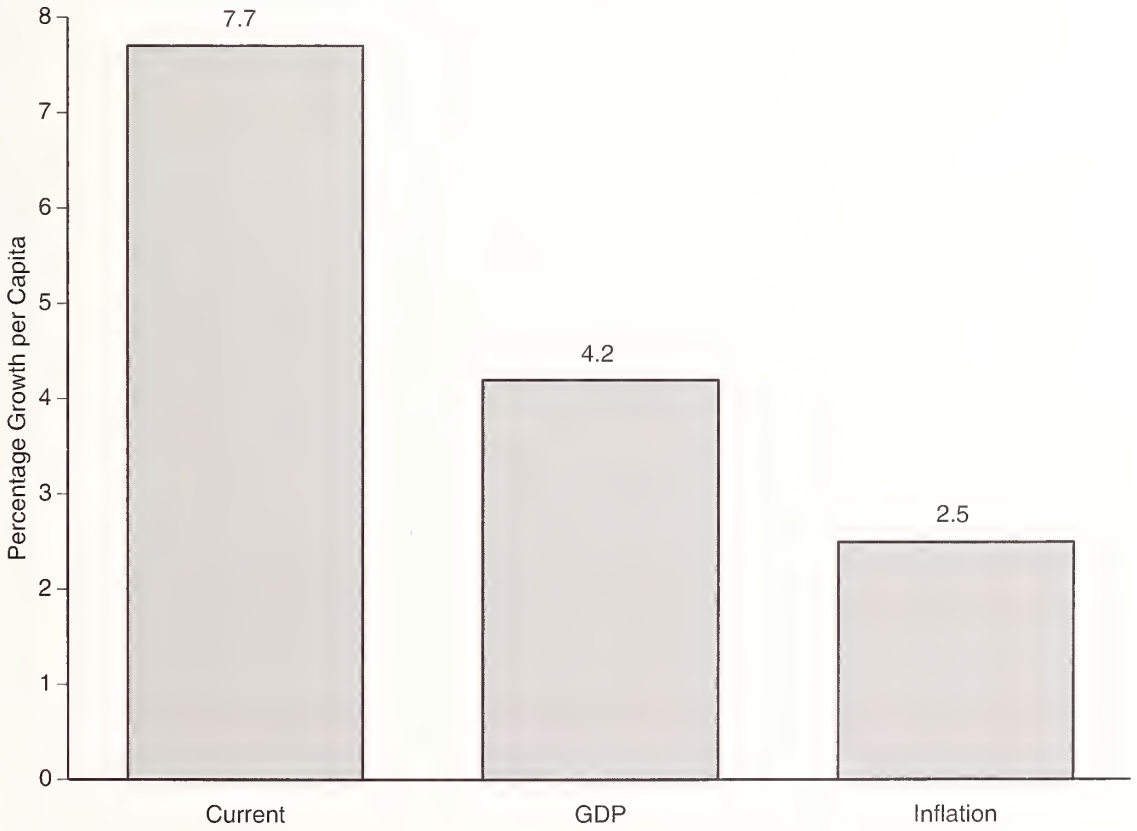
[1] The numbers used in this section are based on the most recent estimates by the Congressional Budget Office (1993). CBO estimates were stated in terms of growth in total health spending. For purposes of this discussion, population was divided out to express targets on a per capita basis.

inflation rate usually is below the rate of growth of the economy, a GDP benchmark means that the nation as a whole can do better than buy the same health services it did the year before. This marginal spending increase can be devoted to expanded access to services for underserved populations, new technology, or other priorities.

Specific policy options then center around whether to recommend a goal that equals GDP growth or that is lower or higher than that benchmark. The range of policy alternatives is theoretically unlimited. To illustrate the range, three options are highlighted in Figure 2-1: the GDP benchmark bracketed by a high-end option (current spending) that would achieve no cost containment and by a low-end option (inflation) that is clearly lower than the Commission or most others believe is desirable or sustainable.

The Commission has chosen not to recommend a specific target formula beyond the general guide of GDP growth, but instead to highlight the criteria or arguments that might be used by the Congress to justify a lower or higher goal in any one year. Even though the Congress retains the authority and the intention to reevaluate the goal each year, it may choose to enact a default goal that could serve either as the basis for an enforceable expenditure limit or as a trigger for some type of standby limit.

Figure 2-1. Comparison of Sample Long-Term Spending Goals



SOURCE: Congressional Budget Office 1993.

Spending Growth Higher than GDP. The argument for a goal that sets health spending growth higher than GDP growth generally takes a broad societal perspective, focusing more on systemwide costs than on federal costs. Such a goal would limit the savings from current baselines compared with the GDP benchmark. An extreme example would be the current rate of growth in health spending, which according to CBO (projected from 1995 to 2000, for total health expenditures) is about 7.7 percent, or GDP plus 3.4 percentage points (CBO 1993).[2] A more realistic example might be GDP plus 1 percentage point.[3]

Historically, most nations have spent a higher portion of national income on health care as income grows—allowing room to make new and improved treatments and technologies more accessible to greater numbers of people. People see health spending as a valued use for their increased income. The U.S. experience of recent decades, however, has witnessed spending growth at a much higher rate in relation to income than has been the experience of other countries.

Over the past decade, U.S. health spending grew nearly 3.5 percentage points over GDP growth, higher than in six selected countries (Figure 2-2). The lowest over that period was Sweden, which actually rose about 1 point more slowly than GDP growth. Spending in Germany and Japan rose at rates only marginally above GDP growth. The highest growth rate other than the United States was in Canada (about 2.8 points over GDP growth). Spending growth relative to GDP in these nations (other than Canada and the United States) was lower in the 1980s than it had been in the 1970s. In fact, the U.S. growth rate was matched or exceeded during the 1970s in France, Japan, and Sweden.

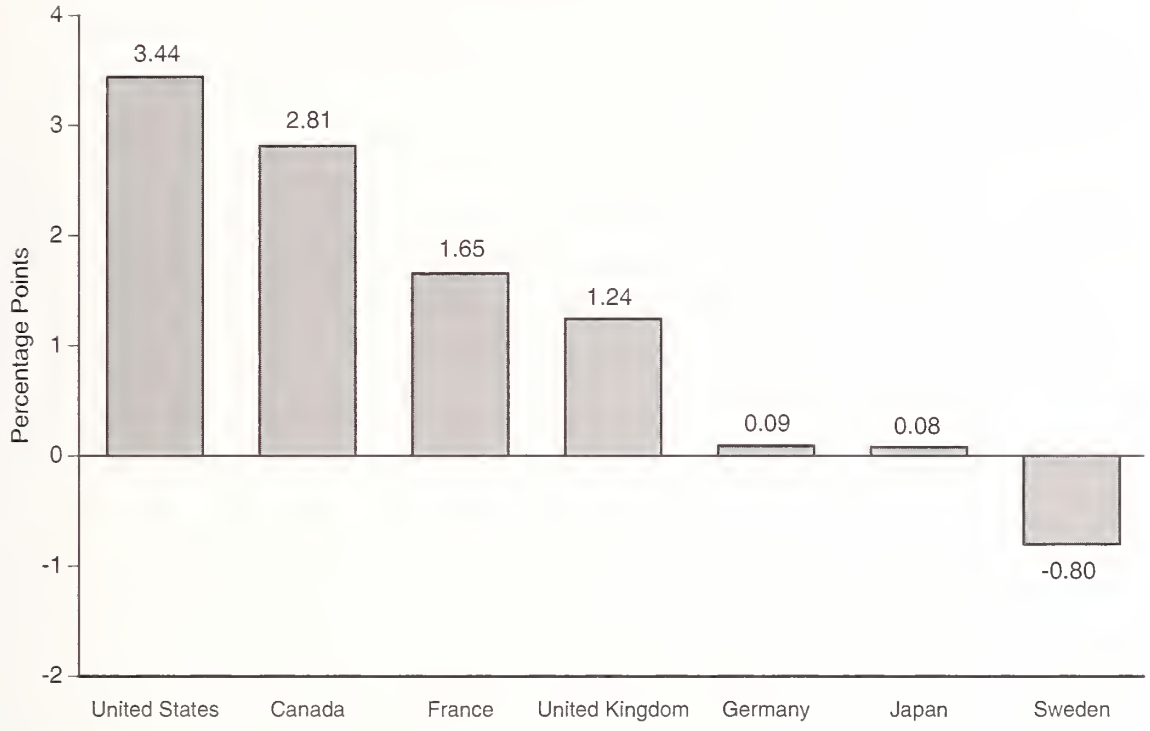
Spending Growth Lower than GDP. The argument for a goal that holds health spending growth below the GDP benchmark is driven most heavily by a focus on federal and state costs and the impact of the system target on federal spending and the federal budget deficit. Such a goal would produce the greatest savings from current baselines. An extreme example would be general price inflation, which is projected by CBO at about 2.5 percent, or GDP minus 1.7 percent, over the period from 1995 to 2000. It seems, however, both unrealistic and undesirable to attempt to sustain a long-term growth rate that allows only increases to cover inflation. Even if policymakers choose not seek a long-term goal below GDP growth, these lower levels may be appropriate in the interim, as set forth below.

For at least a decade, policymakers have operated on the assumption that the American public is unwilling to have federal revenues increase as a percentage of GDP. If the growth in public

[2] Total private health expenditures per capita (excluding Medicare, Medicaid, and other public programs) are projected to rise at a rate of 6.8 percent, or GDP plus 2.5 percent (CBO 1993).

[3] The state of Minnesota, as part of its own reform plan, has set projected spending goals for private insurance. They are expressed as general inflation (as measured by the consumer price index), plus an add-on for medical inflation and other factors. Although the state has not explicitly set a long-term goal, the projected target falls to inflation plus 2.6 percent—or about GDP plus 1 percentage point—by 1998 (Minnesota Department of Health 1993).

Figure 2-2. Growth in National Health Spending Relative to Growth in Gross Domestic Product, 1980-1991



SOURCE: Physician Payment Review Commission analysis of OECD (1993).

spending on health exceeds the GDP growth rate, it would lead to either sharp cuts in other sectors or an increase in the budget deficit. As a result, many policymakers have sought to control direct public spending on programs such as Medicare and Medicaid in recent years. A growth rate for systemwide spending that is lower than current levels would make it easier to hold the line on Medicare spending without creating inequities for Medicare beneficiaries.

Lower goals for total health spending would translate into lower premium growth for private health plans, assuming continuation of a premium-financed system. Although reduced private premiums have no direct impact on the federal budget, they have at least three indirect effects. First, under health system reform, the federal government would spend less on any subsidies to low-income individuals when premiums are lower. If subsidies are set as a percentage of income, then public obligations are particularly sensitive to increases in premiums. Second, the government as employer would spend less on direct payments for federal employees if premiums are lower. Third, reduced private-sector premiums would generate increased federal revenue because individuals and firms or their employees are assumed to pay taxes on money that is saved as a result of lower premiums.[4]

[4] The Administration, for example, estimates $86 billion in new tax revenue under its plan, which in turn pays for about half of the net cost of premium subsidies (Rivlin et al. 1994).

A lower goal might be justified by the argument that the health system has a considerable margin created by inappropriate levels of care, administrative inefficiencies, and unnecessarily high prices. By this thinking, expansions in care for the underserved or needed advances in technology could be financed by ongoing efficiency gains and cost-containment efforts. Although such savings would eventually diminish, they could probably be sustained for a period of several years.

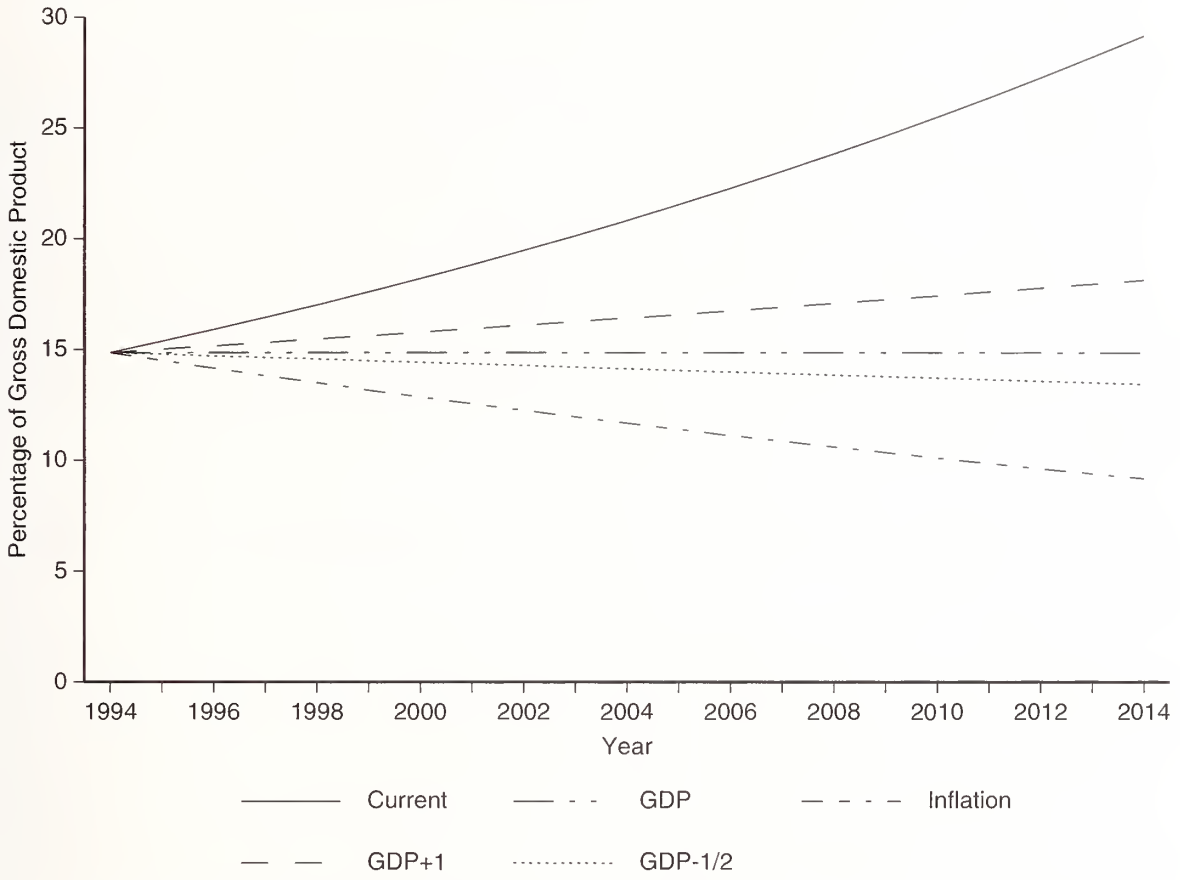
Policy Considerations. If spending goals are to serve as enforceable expenditure limits, a default such as the growth rate of GDP per capita (plus or minus some amount) would have to be established. Yet there are risks in setting a rigid formula. The Congress (perhaps with advice of a commission or national board) should be in a position to balance the relative importance of federal budget demands and societal needs, evaluate the potential for cost savings from changes in the delivery system, judge the risks to access and quality of care, and assess the added costs of new technologies. Based on these considerations, the long-term goal should be reevaluated after system reform is implemented and in place for several years.

Two important policy considerations need highlighting as part of this discussion. One involves the long-term implications of different goals. The other is the need for a specific process to monitor the effects of applying expenditure goals.

Spending goals that appear similar from a single year's perspective can lead to dramatic differences in spending after projecting forward as little as two decades. Spending at current rates would rise to nearly three times current levels (in real terms) after just 20 years, or about 30 percent of GDP (Figure 2-3). By contrast, holding spending to GDP growth would constrain spending to roughly 40 percent over current levels in that same period, leaving spending at the current 14 percent of GDP. Even a "GDP plus 1" standard would hold spending to about two-thirds above current levels, or about 18 percent of GDP after 20 years.

The other consideration is that a system of monitoring should be established to determine whether expenditure limits are adversely affecting the health system. Areas of concern might include the impact on the nation's health, access to care for vulnerable populations, quality of care, technology growth and diffusion, and the availability of various types of health plans in different parts of the country. Monitoring responsibilities should probably be established at all levels of the system, but the federal government (whether through a new or existing entity) has particular responsibilities in this area. Depending on what is learned through this process, the Congress might consider both a higher spending target to minimize any adverse effects and additional resources to pay for this change.

Figure 2-3. Trends in Real National Spending Based on Different Long-Term Goals



SOURCE: Physician Payment Review Commission analysis.

Setting Spending Goals: Pathways for the Short Term

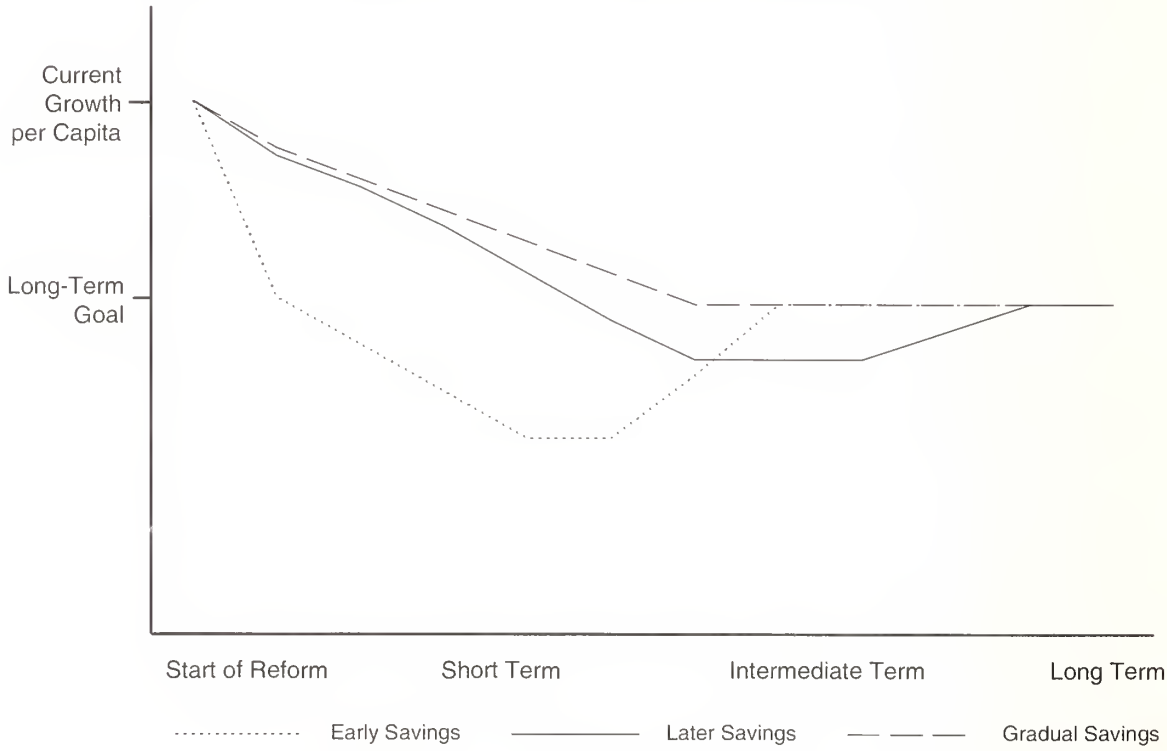
Whereas the previous section looked at the appropriate spending goals for the long term, this section considers how to get from current patterns to these goals, in other words, whether different targets are appropriate in the short and intermediate terms. Among the more immediate competing concerns are the need to allow adequate time to implement and benefit from the effects of various policy changes and the desire to achieve savings from policy changes quickly enough to help finance expanded coverage.

Three pathways, representing different ways to address these concerns, are called "gradual savings," "early savings," and "later savings" (Figure 2-4). All start at the current level of spending growth and converge on a long-term spending goal. They take different routes to that goal, but without a specific schedule of years. The short term might be about five years, but the intermediate term could extend as few as five years or as many as twenty. The pathways are expressed in terms of spending per insured person and omit any short-term

increase that may occur with coverage of new populations. Lower short-term targets, even with the same long-term goal, would tend to generate considerable additional savings in the initial years.

The "gradual savings" pathway sets short-term goals in the form of a gradual phase-in from current high spending levels to long-term targets that fall below the current levels. The other two pathways assume that more savings can be achieved than under the first, but they differ in their estimate of when lower goals for spending growth might be feasible. The "early savings" pathway represents relatively stringent short-term goals that reflect the belief that reforms can produce immediate savings. By contrast, the "later savings" pathway does not seek quick savings during a phase-in period but would set spending growth below the ultimate long-term standard as changes take effect. It could track precisely the "gradual savings" pathway in the short term, or it could set somewhat lower goals than that pathway during the first few years.

Figure 2-4. Pathways for Short-Term Spending Goals



SOURCE: Physician Payment Review Commission analysis.

The "Gradual Savings" Pathway: A Phase-In to Long-Term Goals. Under this alternative, it is assumed that savings possible over the long term, such as those resulting from changes in practice patterns, cannot be achieved immediately. As a result, an extra margin is built into the target for several years. This type of phase-in was incorporated into the Commission's targets for the Medicare Volume Performance Standard (VPS). The Stark all-payer bill (H.R. 200) would lower spending targets over a 5-year period, and the Chafee-Thomas proposal makes the assumption that subsidies would be expanded and universal coverage achieved only as fast as savings were realized—over a 10-year period (by 2005).

This pathway assumes either that relatively few one-time savings could be achieved in the first years under reform or that short-term savings are offset by start-up costs and the time needed for institutions to adjust to reform. Clearly, the changes that would occur under health system reform would introduce substantial uncertainty into the health insurance and health care marketplace—uncertainty that may add some costs while other savings are achieved. Thus, for example, a move toward common data standards and electronic data interchange would eventually save money but would involve start-up costs. Insurers could thus realize some savings, but unless there were stronger competition, they might keep the savings as profits rather than pass them on to purchasers.

A group of insurance actuaries recently catalogued some of the changes that might occur in the first two to three years under the Administration's proposal, each of which would create uncertainties for health plans. Their list includes the creation of sizable new insured populations, the shift of some individuals from public programs like Medicaid to private health plans, the required use of all-payer fee schedules, changes in provider networks and provider practice patterns, high annual enrollment shifts during open seasons, gaming by insurers as they adapt to the new rules, and changes in health plan administrative costs (Jones 1994).[5] The costs that insurers incur in accommodating these uncertainties could, in the short term, cancel out the savings from reduced marketing, elimination of medical underwriting, or the adoption of new data standards.

The "Early Savings" Pathway: Lower Short-Term Goals. Under this alternative, it is assumed that the major structural changes that are part of health system reform would produce one-time savings quickly. These changes would take certain costs out of the system immediately, and spending growth could slow dramatically as these savings are achieved. After a few years, spending growth would revert to a more normal rate. If other changes have been implemented by that time, this rate would be slower than the rate prior to reform. The Administration's proposal, for instance, calls for spending targets that would bring the rate of growth of health costs down to the level of inflation over four years before raising the default long-term target to GDP growth starting in 2001.[6]

[5] Some of these factors will have a greater effect on predicting premiums charged by specific plans than on forecasting the total use of health services by enrolled individuals.

[6] The Congress would have the authority to set the long-term target, but the bill would set GDP growth as the default.

The key issue is where the system can find substantial savings in the short term and how quickly they can be achieved. First, administrative savings and reduced marketing costs would be anticipated from restructuring the insurance market, for example, because insurers would not need to sell individually to small firms. Additional administrative savings would accrue to hospitals and physicians as a result of measures such as standardization of claims forms. Second, some consumers would be expected to move into lower-cost plans as more choices are offered to them with a fixed contribution from their employers. Third, changes in provider behavior, such as reductions in duplicative tests and less variation in practice patterns among neighboring areas, might occur as new pressures are brought to bear. The Administration has released estimates that $305 billion in savings over five years would result from these types of changes (Kronick 1994). Lower goals might be set in the short term to reflect the potential for purchasers, taxpayers, and consumers to capture these types of savings.

The "Later Savings" Pathway: Lower Intermediate-Term Goals. The third alternative takes key features from each of the other two pathways. From the "gradual savings" pathway, it acknowledges that uncertainties would exist in the first years under reform and organizations would take time to respond. It thus assumes that spending growth would drop gradually from current levels. At the same time, it accepts the arguments from the "early savings" pathway that some system inefficiencies and excess spending can be removed. Doing so could bring spending growth below the long-term sustainable rate for some time, but only after a transition period.

As the implementation of health system reform proceeds, the system would start to see results from the new ways of doing business. Efficiencies would be achieved from a new data system, for example, and health plans would have overcome most of the uncertainties noted above. But in addition, after the first few years, the system would be able to accomplish other savings that require a longer lead time. Under the constraints of either rigorous competition or expenditure limits and fee schedules, health plans would be given strong incentives to discover better ways to weed out inappropriate care and to move care into more cost-effective settings. Similarly, it is expected that more choices would be offered to consumers as markets mature and as more efficient plans are created around the country. The health system as a whole would begin to realize savings that a few aggressive employers already claim to be achieving. These intermediate-term trends could result in savings below the long-term baseline for several years.

Selecting the Right Pathway. The key in the short term is how quickly competitive or regulatory forces for cost containment can be expected to develop. Factors such as the increase in utilization by previously uninsured populations, changes in prices paid for services by both fee-for-service and managed-care plans, and changes in administrative costs are particularly difficult to project under any reform scenario and may create substantial uncertainty in total spending on health services. But if policies enacted under reform sufficiently pressure health plans to generate savings and pass them to the purchasers, the

uncertainty can be overcome. The pace of these developments will ultimately determine which pathway is the most realistic.

Because of this uncertainty, the Commission sees the need for considerable flexibility in setting spending goals. This flexibility could translate into a gradual phase-in to long-term goals as in the "gradual savings" or "later savings" pathways, whether or not lower intermediate-term goals are feasible. It would also mean that the Congress should be attentive to how some of the uncertainties play out, so that adjustments can be made. If, for example, the actual costs of extending coverage to previously uninsured populations were more than expected, the goal could be adjusted upward—provided a source of funding could be identified. Flexibility could also mean that goals should not enforced as expenditure limits in the short term, as discussed in the next section.

A key consideration for members of Congress in looking at these choices is the legislative process for scoring the budget costs or savings of any piece of legislation. With the advice of the Congressional Budget Office, scoring considers the net impact on the federal budget of any policy changes. Procedural rules under the Budget Enforcement Act then add obstacles (e.g., requirements for more than a majority vote to approve) to the passage of legislation that increases either entitlement spending or discretionary spending. The Congress can ignore or overcome the procedural barriers created by scoring, but it faces political and economic consequences if legislation adds to the federal budget deficit. Although CBO has not completed scoring all the current legislative proposals, it has suggested that the degree to which expenditure limits can be enforced is a critical factor in its scoring (Reischauer 1993a). As such, it has credited the premium limits in the Administration's proposal with effectively restraining spending, albeit with uncertain side effects (CBO 1994). Scoring has not been completed for proposals that rely exclusively on market mechanisms, though CBO has suggested its unwillingness to score much savings for managed competition.

Whatever goal is chosen will directly affect the budget under health system reform. Higher spending targets would reduce the savings attributed to cost-containment measures. Politically, this reduction may force consideration of alternatives such as raising revenues from tax increases; capping federal subsidies, leading to increased cost shifting to the private sector or less affordable insurance for the poor; scaling back the standard benefit package; or slowing the timetable for achieving universal coverage. Although the Commission's mandate from the Congress does not include the financing of health system reform, it is important to raise the potential implications of different decisions on the appropriate level of health spending.

ACHIEVING COST-CONTAINMENT GOALS

Two broad approaches to achieving cost containment in health care have emerged over the past few years. One looks to the ability of market pressures to encourage cost containment by organized health plans and providers. The other emphasizes government-set limits on either

provider payment rates or plan premiums.[7] The Administration's proposal starts from the first approach by structuring markets so as to achieve savings while also incorporating a system of premium limits and fee schedules to serve as a backup to guarantee that savings are achieved. Others, including the Stark Medicare-for-all and all-payer bills and the McDermott-Wellstone single-payer bill, look primarily to rate setting to control costs. Still others, including the Cooper-Breaux, Chafee-Thomas, Nickles-Stearns, and Gramm-Santorum bills, rely totally on market mechanisms to control costs. Each would restructure the system in different ways to enhance market forces and would avoid any regulation of provider payment rates or premiums.[8]

The Commission over the past two years has analyzed a variety of approaches to achieving cost-containment goals. In a July 1993 report to the Congress, *Expenditure Limits: Design and Implementation Issues*, it considered issues that might arise in setting up expenditure limits, especially as they relate to physicians and other professional health care services (PPRC 1993). That report, summarized in Chapter 4, focused specifically on the enforcement of expenditure limits through rate setting, the applicability of rate setting to organized systems of care, and issues involved in assigning limits to states. Other Commission analysis has looked at the ability of premium limits to control costs and at some of the mechanisms for structuring markets that are part of market-oriented proposals (see Chapters 3 and 6).

The Commission is particularly interested in ways to combine these different approaches. Such combinations are defended on the grounds that either approach used alone risks achieving less in cost containment and quality enhancement than proponents envision. On the one hand, competitive forces in a well-designed market should impose some restraint on costs. On the other hand, market mechanisms have not proven their capability for achieving significant savings and may need the discipline of enforceable targets to achieve cost containment, especially when government outlays are at risk. The Commission asserts that judicious combinations of the two approaches not only limit the impact of possible failure of either approach, but also leave the system better prepared to emphasize the more successful approach.

[7] Another option—not considered here—is to place states at risk for cost containment. This option would avoid making one national decision on the balance between rate setting and premium limits, but would allow states to make different decisions. This approach is used in the McDermott-Wellstone single-payer proposal and in several bills in the 102nd Congress. In addition, a provision in the Administration's bill would allow states the option of going at risk. In general, this approach assumes that states might choose a single-payer approach with rate setting or premium limits or any other approach to cost containment. But states would be at risk in the sense that they would have to raise revenues if spending in the state exceeded the federal contribution. Under the Administration's variant, the state's maintenance-of-effort payments relative to current Medicaid beneficiaries would be reduced if savings were achieved relative to the targets.

[8] Space does not permit a full discussion of the issues involved in debating the relative merits of these approaches. They include (1) the appropriate size of the government's role in the health care marketplace; (2) the overall effectiveness of price-control mechanisms; (3) the ability of managed competition to strengthen market forces; (4) the savings expected under different approaches; and (5) the impact of these approaches on consumers, providers, businesses, and others.

Achieving Cost Containment through Market Forces

Some reform proposals stress the role of the marketplace in achieving cost containment. Markets can control costs primarily by encouraging providers and consumers to join health plans that are structured as organized systems of care and by having these plans compete vigorously on a level playing field.[9] Reforms would also change the rules by which markets operate to avoid some of the failures that limit competition today. Most market advocates, however, would rule out the use of expenditure limits, arguing that strict expenditure limits would add complexity and rigidity to the health system.

Those in the managed-care industry, as well as many corporate benefit managers, point to an improving record of cost containment in recent years, as a result of aggressive management. They believe that costs are lower in competitive markets where organized systems of care are dominant than elsewhere. Unfortunately, empirical evidence of this success is limited. The Commission previously found only limited evidence in the research literature that staff-model and group-model health maintenance organizations (HMOs) can reduce costs somewhat and that costs were lower in markets with high HMO penetration (PPRC 1992). More recent reviews by the Congressional Budget Office (1992) and the General Accounting Office (1993) reached similar conclusions. The absence of research supporting the success of managed care should not be interpreted as evidence of its ineffectiveness, especially given that few studies are recent enough to study the rapid changes that have been occurring in managed care.

At the same time, advocates and detractors of this approach would both probably agree that today's markets are not structured to maximize their effectiveness and that a restructured market might show better results. In redesigning markets, some would emphasize cost-conscious purchasing by individuals, whether achieved through incentives to choose the low-cost plan in a managed-competition structure or through a system of individual vouchers. Others would stress the role of group leverage on plans and providers, whether through alliances, existing purchasing groups, or the efforts of large employers. They point to the experiences of large employers that have controlled the rate of increase in the cost of insuring their employees and of the California Public Employees Retirement System, which has exercised its purchasing power in the last two or three years to hold down premium increases.

Achieving Cost Containment through Federally Enforceable Expenditure Limits

Other reform proposals stress the importance of expenditure limits enforced through constraints on either provider payment rates or health plan premiums. Expenditure limits, if

[9] Different terms like organized systems of care or integrated service networks are often introduced in place of the traditional managed-care models to emphasize that not all existing organizations are satisfactory and that new models may be needed. One characterization refers to these key components: integration of financing and delivery, use of a panel of providers selected on the basis of quality and cost management, and accountability to purchasers and patients on the basis of information on cost and quality (Milgate and Cronin 1993).

properly structured, can address both the price of services and the number of services that patients receive. Some proponents would achieve these results through a single-payer structure and claim considerable administrative savings through this approach. Others would preserve the private insurance that most people now have, but would take measures to ensure that costs can be controlled. In either case, a critical issue is how increases in the volume of services would be handled.

Proponents of this approach point to successes of cost-containment initiatives in state all-payer systems, in Medicare, and in various national systems in other countries (Davis 1993). Implementation of Medicare's prospective payment system, for example, led to a reduction in the annual growth rate for hospital inpatient payments from 9.1 percent before reform to 2.5 percent in the first six years under the new system. Since 1989, however, hospital inpatient spending has grown at significantly higher rates (ProPAC 1993). Medicare payments to physicians have recently slowed due to price constraints, but the effects of increasing volume of services remain difficult to evaluate (see Chapter 19).

As noted earlier, the Commission has looked extensively at the merits of both rate setting and premium limits for achieving cost-containment goals. In particular, it has analyzed the system's ability to put either approach into place quickly and has focused on how each might be implemented without inappropriately influencing either access or developments in the delivery of care. It has spoken consistently about roles for both approaches to enforcement in order to preserve a system that offers managed-care and fee-for-service options to providers and consumers alike.[10]

The issue is how to strike a balance between the two approaches to enforcing expenditure limits and between fee-for-service and managed-care delivery systems. Should the playing field be level? Should it be tilted to favor one type of delivery system? Should it be prepared to tilt as consumers, providers, and health plans shift from one system to the other? A system that relies primarily on rate setting, creating a carve-out for a limited set of managed-care plans (e.g., group-model and staff-model HMOs), would tend to restrict the growth of the various types of network plans by making it difficult for them to pay providers other than on the standard fee schedule. By contrast, a system that relies mostly on premium limits, even with fee schedules to help fee-for-service plans meet the limits, may make it less likely that fee-for-service plans will survive, while encouraging the development of managed-care plans.

Rate Setting as the Primary Approach. Rate setting draws on the Medicare program's experience in developing mechanisms both for setting payment rates for hospital and physicians' services and for addressing volume. It would apply these mechanisms to private payers. Under this approach, cost containment would be driven by public decisions on rates

[10] Among the bills that use expenditure limits, there appears to be a degree of consensus on the need for both rate setting and premium limits. The McDermott-Wellstone single-payer proposal relies most heavily on rate setting, but limits the premiums paid to managed-care plans (these premiums are paid wholly by the government). By contrast, the Administration's proposal relies most heavily on premium limits, but also assigns a role to fee schedules.

of payment for medical care services and would incorporate a mechanism such as Medicare's Volume Performance Standard to address volume changes. By setting rates lower than current ones or allowing them to increase more slowly, the rate of increase in health spending could be reduced (see Chapter 4).

Although this approach to cost containment makes sense for fee-for-service plans and out-of-network use in other plans, it does not so easily accommodate managed-care plans. Rate setting could be made compatible by exempting some managed-care plans, but this approach might not achieve the control over total spending that a rate-setting strategy seeks. Moreover, the line between categories of plans is extremely difficult to draw. The Commission would prefer that cost containment accommodate these trends rather than restrict managed care to traditional models, while ensuring some accountability for future cost growth.

Whether competition from fee-for-service plans subject to all-payer rate setting would impose adequate discipline on managed-care plans is unclear. Some suspect that managed-care plans would keep premiums just enough below their competitors to gain enrollment. Others have more confidence that direct influence on the price of services for fee-for-service plans would set a standard that the market could apply to managed care.

One variation would involve two parallel systems. Premium limits would be applied to the managed-care sector (perhaps including all plans that create networks of providers), where they are most appropriate. Fee schedules would be used for fee-for-service plans, where premium limits are least likely to be effective. Single-payer and Medicare-for-all proposals are special cases of this approach where fee for service is available only through a public plan, but where some form of limit on premiums could be applied to managed-care plans.

A second variation involves a single public fee-for-service plan that would have its costs controlled by rate setting with a mechanism to control volume (see Chapter 11). This scenario contrasts with the current system where multiple private fee-for-service plans have little ability to achieve cost containment on their own. This scheme would link most public costs to the public fee-for-service plan and might leave policymakers more willing to rely on market discipline for the managed-care sector.

Premium Limits as the Primary Approach. Premium limits are viewed by some, including the Administration, as a more appropriate approach to cost containment, because they give each plan the flexibility to determine how best to achieve spending goals. Premium limits are most appropriate for managed-care plans, but could work for fee-for-service plans if accompanied by fee schedules (as in the Administration's proposal). The Commission has examined the system's ability to initiate a policy of premium limits at the outset (see Chapter 3).

In general, premium limits could create unintended inequities because of data problems and the inability to adjust adequately for risk. The few databases available to set expenditure

limits at either the state or substate level are inadequate to the task. The Administration's proposal would rely on data available in 1995 to implement premium limits. Although new databases and methods are being developed, the Commission remains pessimistic about how well this task can be accomplished (see Chapters 3 and 5).

In addition, premium limits may put more pressure on plans that have attracted costlier enrollees and may risk endangering access for these people. The Commission has studied the issue of risk adjustment and remains uncertain about the ability of current models to control adequately for risk selection (see Chapter 8). Although a variety of risk adjusters and risk-sharing mechanisms could be incorporated into the system from its start, it is clear that a significant proportion of risk selection would remain unmeasured and unadjusted.

The Commission has explored elsewhere in this report mechanisms that may mute some of the problems associated with unmeasured risk selection or data gaps. Others have also suggested ways to modify the Administration's proposed system of premium limits by building in more flexibility. The work group of actuaries cited earlier proposed eliminating the annual premium target for each plan in favor of a five-year performance standard so that plans have the flexibility to achieve savings in whatever year their reserves, market position, or ability to respond to transitional problems permit. Under this suggestion, each plan would have a "glide path" (high and low boundaries) within which it must remain over the five years and a three-year check point at which the plan's performance and likelihood of achieving its target would be reviewed (with the possibility of a bid being rejected at that point) (Jones 1994).

Achieving Cost Containment through Combined Market and Expenditure-Limit Approaches

As noted earlier, the Commission is particularly interested in approaches that take advantage of both market forces and the different mechanisms used to enforce expenditure limits. In reality, there are several different ways to combine approaches. The first combines market mechanisms with expenditure limits enforced primarily by premium limits, accompanied by fee schedules, as in the Administration's proposal. With the second, market forces could be applied to managed-care plans, and fee schedules with a VPS-based mechanism could be applied to fee-for-service plans. Finally, market mechanisms with standby premium limits could be used.

The Administration describes its approach as managed competition, with a backstop of premium limits. Administration representatives build a case for the ability of various reforms to achieve enough short-term cost containment to avoid the premium-limit triggers, at least in most regions. Yet many who look at the tightness of the spending targets conclude there is little likelihood of avoiding the use of premium limits. In its analysis of the proposal, CBO (1994) concludes that premium limits, if maintained, would be effective even though they would create considerable tensions, especially in some regions. To the extent that these

conclusions are true, the Administration's approach is best described as premium limits with managed competition included to help make them work (see Chapter 3).

The second approach varies from the first in leaving the managed-care sector unregulated by premium limits. For fee-for-service plans, it would rely on the use of provider fee schedules that incorporate a VPS-based mechanism to address volume changes. Fee schedules could also be applied to all services paid on a fee-for-service basis outside of plan contracts with providers. This strategy builds on the assumptions that the system has more experience with rate setting than with premium limits and that competition with fee-for-service plans will force managed-care plans to hold the line on their premiums. Representative Stark used this strategy in his all-payer rate setting bill, and it is also the approach underlying the ideas developed by the Commission in Chapter 11.

The third approach would rely solely on market mechanisms in the early years, but with standby premium limits. The Commission has considered whether market forces would be more effective if accompanied by a policy of standby premium limits triggered if certain spending growth goals were not achieved in the first few years under reform. The use of standby premium limits would pressure plans to achieve savings without applying those pressures in the first few (potentially chaotic) years while plans, providers, and consumers react to the reforms. This option would also give policymakers more time to develop the data capability for tracking state and substate expenditures and the methods needed to impose premium limits more accurately and fairly (see Chapter 3).

From the perspective of budgetary scoring, it appears that the third option and, to a lesser extent, the second might not achieve the same savings as the Administration's approach. CBO has shown a greater willingness to attribute savings to enforceable expenditure limits (with either approach to enforcement) than to marketplace competition, although it has not completed its scoring of many of the proposals now before the Congress. Its analysis of the Administration's bill, for example, concludes that $52 billion would be added to the deficit in 1998 if premiums were 10 percent higher (CBO 1994). As a result, the Commission recognizes that these options might require policymakers to increase revenues or to slow the expansion of coverage.

AN OVERALL STRATEGY FOR COST CONTAINMENT

This chapter has outlined the Commission's overall strategy for cost containment, including goals for the long term and for shorter time frames. It has also described the Commission's preference for taking advantage of both market mechanisms and expenditure limits for achieving cost containment. As the elements of this strategy come together, the Commission calls attention to policies that address both sides of the price-quantity equation. The concern is that too many services are given to patients and that too many dollars are paid per unit of service. Any strategy that ignores either of these factors might

easily fail. The chapters that follow offer a more detailed treatment of the individual elements of this strategy.

Expenditure limits can play a critical role, especially on the fee-for-service side of the health insurance market. Adoption of fee schedules for practitioners who are paid on a fee-for-service basis outside of specific contracts with health plans would address the price side of the equation. At the same time, a mechanism modeled on Medicare's Volume Performance Standard would provide collective incentives to control the number of services provided to patients. Together, these policies could support a more effectively functioning insurance market by helping those plans with fee-for-service components control costs. Achieving some control over this segment of the market might strengthen the competitive pressures felt by managed-care plans (see Chapter 4).

Stronger market mechanisms might also help achieve cost-containment goals. Large businesses in particular point to their success in bringing discipline to the market, especially by moving more employees into managed-care plans. This success, however, has been limited. Too often the insurance market is characterized by high administrative costs, weak competitive pressures to contain costs, exclusion of some people with preexisting health conditions, and vulnerability for plans that enroll older or sicker people. Structural reforms such as community rating, risk adjustment, open seasons for insurance enrollment, and the creation of mandatory purchasing entities for certain market segments could allow markets to operate more effectively by removing some impediments to strong competition (see Chapter 6).

Some reform proposals would take an additional step in imposing discipline on the competitive market. They would apply premium limits to ensure that health plans, especially managed-care plans, achieve real cost containment. The strength of this approach is that it would let plans determine how best to address price-volume trade-offs in controlling costs, but would require that they do so. Without proven risk adjusters or adequate databases for setting targets, premium limits could create unintended inequities and disrupt delivery of care. Yet it might be wise to establish a standby mechanism for premium limits in the event that market-based cost containment should prove ineffective. Managed-care plans would have an opportunity to control costs before premium limits would be used (see Chapter 3).

A final priority is the adoption of complementary initiatives that include Commission recommendations relating to control of the number and specialty mix of physicians, increased use of nonphysician practitioners, development of a national data strategy, dissemination of practice guidelines and long-term funding to support research on medical outcomes, and enactment of medical malpractice reform. These initiatives, which generally address volume more than prices, would help produce tools by which health plans and providers may be able to control costs. The result would be a abatement of the pressures that fuel cost increases, thereby reducing the dependence on expenditure limits to meet cost-containment goals (see Chapters 12 through 16).

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CHAPTER 3

SETTING PREMIUM LIMITS FOR PLANS

Chapter 2 discussed the broad issues in cost containment, placing premium regulation in the context of other approaches to limiting health care expenditures. This chapter carries the discussion of premium limits further, asking what would be the best approach to premium regulation if such a policy were adopted. It does not address the question of whether premium regulation should be adopted as part of health care reform.

The primary potential advantage of premium limits is a guarantee of cost containment for the portion of health care payments covered by premiums. If effective, premium limits would ensure a limit on increases in the cost of insurance. Such a guarantee is particularly important if new mandates or entitlements are created as a part of reform. Perhaps as important, premium limits provide scorable savings in the federal budget process to allow expansion of health insurance coverage without significant tax increases. Other advantages of premium limits include applicability to all health care plans and decentralization of actual cost-containment decisions.

Premium limits may have significant drawbacks, however. First and most obviously, limits on payment might disrupt service delivery. It is quite difficult to know what level of costs plans could feasibly achieve. There is scant knowledge about plans' current costs, probable cost growth in the near future, changes in costs as system reform begins, variability in cost growth across plans, or ability to reduce costs in the face of premium limits. In addition, premium limits might interfere with the competitive process. Limits might discourage competition by providing a de facto price floor or by reducing the entry of new competing plans. Some forms of limits could penalize efficient plans or encourage plans to try gaming the system with very high bids.

Development of the most effective set of limits requires attention to the benefits, drawbacks, and trade-offs associated with various approaches. The Administration's proposal for health care reform details one approach to premium limits. In that proposal, premium limits begin immediately, apply to each state or alliance separately, restrict all states or alliances to a nationally uniform rate of premium growth, and set allowances for each individual plan based on the year-to-year growth in that plan's premium.

Premium limits could, however, be structured quite differently. They need not begin at the inception of reform, but could be delayed or phased in over time. Limits could be triggered on the basis of national spending totals rather than on totals in individual states or alliances. Limits for individual plans could be based on a given level of premiums rather than on premium growth.

After carefully weighing the pros and cons, the Commission concluded that premium limits should be used as a standby or backup approach to cost containment. There is too much uncertainty—in measuring current spending, in projecting spending growth, in restructuring the market, in cost variation—to put detailed premium targets into place immediately. Early implementation of targets could stifle rather than enhance other approaches to cost containment. Yet the presence of targets could be a valuable stimulus for innovative approaches to service delivery. If premium limits are used, they should initially be triggered only if national spending exceeds targeted goals and only when data are available to set limits fairly and accurately.

RECOMMENDATION

If premium limits are adopted as part of health care reform, they should be a backup or standby approach to cost containment. In the interim, the databases and methods needed to impose them accurately should be developed. Premium limits should be triggered only when total U.S. health spending exceeds the targeted level.

In addition to the need to allow time for reform to become established, limits should be structured to have the smallest negative impact on competition and other cost-containment forces. In particular, limits should ultimately be based on the level of premiums rather than an allowable rate of premium growth for each plan. This would be simpler and would not disadvantage efficient plans or encourage plans to try "gaming the system" with very high initial premium bids. Limits based on premium levels should be put into place as soon as risk-adjustment formulas can provide a reasonably level playing field for comparing premiums across plans.

RECOMMENDATION

Premium limits ultimately should be uniform for all health plans in a market or community, rather than being based on what an individual plan charged in the past. A transition from plan-specific to marketwide premium limits should be allowed to give plans time to adjust and to allow for further strengthening of risk adjustment methods.

ISSUES IN A SYSTEM OF PREMIUM LIMITS

This section identifies the major trade-offs in establishing a system of premium limits. The advantages and disadvantages of premium limits are broadly grouped into two areas: cost containment and competition among plans.

Premium Limits and Cost Containment

The primary consideration in premium limit proposals is the balance between cost savings and the potential for disrupting markets. Premium limits have the potential to produce significant cost savings. That guarantee of savings would both limit the financial liabilities arising from health care reform and allow coverage to be expanded faster than it would otherwise. On the other hand, it is difficult to know where to set the limits, particularly in the early years of reform. There is little information available to suggest what a reasonable margin for error in setting the limits might be. Limits that are too far below costs in an area risk interfering with the delivery of health care.

Potential for Higher Cost Savings Than Competition Alone. The first and most obvious potential advantage of premium limits is that they might reduce the cost of health care below what would occur from market competition alone. Premium limits might substitute for otherwise weak demand-side pressures for cost containment.

The principal argument in favor of this is that the demand side of the health care market is and may remain relatively weak. Currently, consumers face reduced economic incentives to seek value when choosing a health care plan. They typically pay only a portion of premium costs, with the bulk of premiums paid directly by employers in pre-tax dollars. Once insured, consumers face similarly weak economic incentives to weigh costs and benefits of the services they use because copayments typically amount to only a fraction of the cost of each service. Even if motivated by considerations of cost, consumers may have little capability to seek value in the health care they purchase. Some experts question consumers' ability to calculate and compare costs and benefits for alternative providers or treatments, or even to gather information on fees and costs.

Risk selection adds a second barrier to the efficient working of competition. A plan's costs are strongly influenced by the health risk of its enrollees. This means that differences in premiums across plans reflect not only variations in efficiency and benefits, but differences in risk selection as well. The movement of consumers to low-cost plans need not necessarily improve the overall efficiency of service delivery if costs are low due to risk selection.

The competitive advantages of efficient plans are muted under these conditions. Consumers are relatively insensitive to value, and, because of risk selection, plans with low premiums may or may not be efficient ones. Because of this, competition might not drive plans to exploit all reasonable cost-saving measures.

Aspects of many health care reform proposals are aimed at addressing the weaknesses of the demand side of the market. Limitations on employer contributions or on tax advantages of health insurance would heighten contrasts in plans' costs. Uniform benefits would allow consumers to compare plans' costs more readily, while quality performance reports would

provide comparable information on plan performance. Risk adjustment should result in premiums that more nearly reflect efficiency and value rather than risk selection.

It is not clear how well health care reform will succeed at strengthening the demand side of the market. Under many of the proposed standard benefit packages, cost sharing will on average be lower than it is today. Some reform proposals give employers a completely passive role, preventing them from limiting choice of plan or total premiums paid.

Limits on premiums could create two types of incentives to identify and utilize additional approaches to cost reduction. First, an individual high-cost plan would be faced with a choice between incurring losses or reducing costs. By removing the option to raise premiums, this focuses the efforts of such plans in the direction of lower costs rather than higher revenues. Cost reductions would ideally occur through improvements in efficiency, but might take the form of reductions in the number or quality of services provided or increases in copayments. Second, the presence of premium limits establishes cost pressures across the industry as premiums of high-cost plans move downward, making those plans more competitive.

Scorable Savings, Cost Guarantees, and Expansion of Coverage. A further benefit of premium limits is that, if effective, they would provide a guarantee of savings. This allows the savings to be scored under congressional budget rules, which in turn permits health care coverage to be expanded more rapidly than would otherwise be the case. In addition, the guarantee of cost containment limits financial liability if individuals or firms are mandated to purchase care and puts a ceiling on any entitlements or subsidies.

Scored savings from premium limits could arise from a number of sources. First and most directly, premium limits reduce federal spending on any subsidies that might help the poor and small businesses to purchase insurance. Second, they could lower the growth in Medicaid spending if Medicaid programs are included under the limits. Third, they reduce private health insurance costs, resulting in greater taxable wages or profits and thereby increasing tax revenues.

These savings contribute significantly to the ability to expand coverage under many alternative reform proposals. In the Administration's proposal, the scored savings minimize the tax increases needed to allow universal coverage. With many alternate proposals, coverage is increased only as savings materialize. Either way, expansion of coverage is generated by the cost savings.

A second important function of the premium limits is to provide a guarantee on financial liabilities if individuals or firms are mandated to purchase insurance. Without a guarantee that costs will be controlled, any mandate or entitlement is open-ended. An open-ended mandate would clearly face more opposition than one that was guaranteed to be below some maximum percentage of income, payroll, or tax revenues.

Feasibility of Limits. The downside of premium limits is the prospect that limits might be set too low. It is difficult to know where premiums are now, where they will be in the near future, how low they could feasibly be set, and how low they should be set. There is a significant risk of disturbing the delivery or the quality of health care services if limits are set far below the costs that plans in an area could feasibly attain or if limits force reductions in services that individuals value highly.

First, it is difficult to know where premiums are now. There is no centralized repository for standardized premium information. Existing state-level spending estimates are acknowledged as crude, and publicly available estimates of spending at substate areas are largely non-existent (see Chapter 5). The Health Care Financing Administration (HCFA) is attempting to remedy this through a major survey of premium and benefit levels across the country, but at this point it is far from clear how accurate the resulting premium estimates will be.[1]

Second, it is difficult to know where premiums will be during the early years of health care reform. Premium growth is volatile, even at the national level. Between 1980 and 1989, annual growth in employers' spending on health insurance premiums varied (in real terms) between 2 percent and 17 percent (Gabel et al. 1991). This problem is compounded by the further volatility of spending growth across states (PPRC 1993).

The effects of reform itself add uncertainty to projections of future premium levels. Under the Administration's proposal, for example, both the uninsured and current Medicaid recipients would join mainstream health care plans. The privately insured, meanwhile, would have access to all plans offered, potentially resulting in large shifts in enrollment from plan to plan. The net impact of the changes that could occur is quite difficult to predict.

Much of this uncertainty surrounding the average level of premiums in states or smaller areas would be resolved after a few years under a reformed system. Premium information would be available across all states. A few years of operation would allow temporary changes in profits and reserve levels to even out, providing a relatively clear picture of premiums. Reform would also help to identify some of the determinants of variation in premiums across plans. A uniform benefit package and risk adjustment, for example, would eliminate a portion of the variation in premiums across plans.

Third, it is difficult to know how low premiums could be set. If plans individually (or states as a whole) could rapidly and painlessly adjust to lower payment rates, this would not be much of an issue. Neither the amount of unexploited cost savings in the current market nor the pace at which those cost savings could be adopted are known with any accuracy.

[1] HCFA is gathering information on benefits and premiums from an estimated 51,000 establishments nationwide.

Effect on Competition and Plan Behavior

Another consideration in imposing premium limits is the impact on competition among plans and on plan behavior. Premium limits, if properly structured, could retain many of the desirable aspects of a competitive market. They could be applied uniformly to all plans but would leave plans free to choose their own strategies for reducing costs. In addition, limits could be structured to allow for significant variation in premiums. On the other hand, the presence of premium limits could significantly alter plan behavior in ways that would be anticompetitive.

Compatibility with Competition. A well-structured set of premium limits could exhibit a fair amount of compatibility with the normal competitive process. First, this form of regulation is applicable to all types of plans. There would be no need to establish separate identification and treatment of fee-for-service and managed-care plans. In that sense, it embodies the traditional notion of a level playing field.

A second advantage of premium regulation is that it has an inherently broad focus, affecting everything covered by the premium. Only noncovered services and copayments would not be directly affected by the premium limits. Decisions on how to achieve cost savings would be decentralized to the individual plans. Plans could adopt any combination of changes in fees, quantity of care, or substitution across types of services or providers. This decentralization of actual cost-containment decisions is particularly important when, as is typically the case, the best approach to cost containment is unknown. Plans can experiment to determine which cost-containment strategies they find most effective.

Finally, premium limits could be structured to allow for significant variation across plans within a given marketplace. The need to guarantee a given level of costs need not imply that all plans have to be offered at the same price, or even that a uniform maximum price apply to all plans, as would be the case under traditional price controls. Instead, it is probably enough to guarantee that spending for the average individual in each market area not exceed some established level. That degree of regulation can be accomplished while still allowing for a significant degree of premium variation across plans.[2]

Underwriting Cycle and Penalties for Poor Prediction. One way in which premium limits might interfere with plan behavior is in interaction with underwriting cycles. In the aggregate, insurers' premiums and profits have exhibited a roughly six-year cycle, going from low premium increases coupled with increasing losses to high premium increases followed by rising profits (Gabel et al. 1991). For individual plans, a poor cost prediction that results in premiums below costs can, within the limits of competition, be recovered through steep premium increases in later years. Thus, for the industry as a whole and for the individual

[2] This is the case in the Administration's proposal, where only the highest-cost plans in the highest-cost alliances are subject to premium reductions.

firm, the penalty for underbidding is a temporary loss of profits and the potential disruption of market relationships caused by large subsequent premium increases.

That flexibility might be lost under a system of premium limits, particularly if those limits are set quite low. In the aggregate, industrywide losses cannot be recouped through higher premium increases if the limits are binding. For an individual plan, losses in one year might be difficult to recoup in later years if that plan is subject to premium limits.

At a minimum, this would probably induce plans to bid cautiously (high) during the earlier years of premium limits, at least until they have built up significant reserves. Alternately, it might create permanently higher bids to offset the permanently higher risk of loss faced by plans (Jones 1994).

Premium Caps As Premium Floors. Another potential disadvantage in terms of plan behavior is that plans might all price their products at or near the premium caps. Plans clearly gain competitive advantage from bidding low. As noted above, however, plans may be averse to bidding low from a heightened fear of financial losses. It is far from clear how competitive pressures and risk of loss would play out under a system of premium limits.

One alternative would be for many plans to bid at the premium caps. Such bids might be the most easily defensible option for plan managers. This could be justified to boards of directors on the grounds of fiscal prudence, being the maximum bid with which they would be sure to be free from mandated premium reductions.

Price competition would be significantly weakened if enough plans reasoned in this fashion. Premium limits would provide a publicly announced pricing point around which plans could cluster their bids. If this took place, then the caps effectively become price floors and stifle the competitive process.[3]

Effect on Entry and Exit. Premium regulation may have significant effects on entry into individual markets. Plans would probably be unable to enter a market with premiums that exceed the premium limit. This would prevent plans from cushioning their initial startup costs with somewhat higher premiums during early years of operation.

This drag on entry would probably affect different types of plans to different degrees. Group- and staff-model health maintenance organizations (HMOs), which typically own clinics and other facilities, would probably face greater financial risks than network-type HMOs, whose operations require lower initial capital investment. Entry would also be more difficult for small firms relative to larger ones, as larger, more heavily capitalized firms would clearly have a significant advantage in spreading and absorbing risks of this sort over smaller, less well-capitalized firms.

[3] The Administration's proposal seems to anticipate this, and allows alliances to keep the level of the premium cap secret until after the first year's bids have been submitted.

THREE DESIGN ISSUES IN PREMIUM LIMITS

This section discusses three major issues in designing a system of premium limits. These are whether to limit the level of plan premiums or the rate of growth in premiums, whether to impose limits immediately or on a standby basis, and whether to set limits at the state or national level. The section ends by summarizing the Commission's conclusions and describing a model system of premium limits.

Limiting Levels or Limiting Rates of Growth

One basic issue in the design of a system of premium limits is the choice between setting limits for the level of premiums or setting limits for each plan's growth in premiums. Both options have benefits and drawbacks.

On the one hand, limits could be set on each individual plan's premium growth. Such limits would grandfather each plan's initial premium level, thus preserving whatever diversity existed when the premium limits were imposed, including any biased selection that was already reflected in each plan's premium. Such limits could have significant anti-competitive effects, however, and could encourage plans to attempt to game the system with high initial bids.

Limits based on a given level of premiums in each area are far simpler to understand and implement. These limits would at least nominally place all plans on a level playing field and would advantage efficient plans over inefficient ones. On the other hand, plans that suffered significant adverse selection (if not captured by a risk-adjustment process) would be strongly disadvantaged.

Penalizing Efficient Firms. Under a system of limits based on increases in premiums, plans that enter the system with less slack are at a considerable disadvantage. Slack, in this case, could be either profits, reserves (or accumulated surplus), or inefficiency. Any of these provides leeway for plans to meet premium caps.

Probably the most important consideration here is that plans that are both efficient and low-priced face a difficult trade-off in the first year of reform. These plans must choose between alienating their current customer base with a large premium increase or doing nothing and potentially locking themselves into lower reimbursement levels. Either case offers the opportunity for these plans to disadvantage themselves relative to their rivals.

Another significant consideration is the slack provided by current profits and reserves (or accumulated surplus). Nonprofit providers are generally required to maintain only those profits and reserves consistent with the reasonable operation of their business. Excess profits must be returned in the form of lower premiums or in some type of community service. Thus, this class of providers would at least nominally be barred from attempting to build up surpluses to help ease the transition to premium limits.

Finally, small firms in general face greater variability in profits and typically have shallower capitalization and lower reserves. In particular, firms that exist in just one state or alliance area, as is the case with many small and medium-sized HMOs and most if not all Blue Cross Blue Shield plans, are subject to significantly greater risk than larger, multistate organizations. Given the natural variation in expenditure growth, multistate firms would be able to offset losses in some areas with gains in others, while single-area plans would be wholly at risk for local market conditions (and for any errors in the baseline in their one geographic area). All other factors being equal, uniform premium limits would disadvantage these small and purely local firms compared to larger or more geographically dispersed rivals.

Invitation to Attempt "Gaming" Bids. Limits based on premium growth invite plans to attempt various types of gaming. In a normal auction market, firms have incentives to offer bids that reflect their cost structures because they expect to get the amount that they bid if they win. With limits on premium growth, however, the future revenue stream deriving from a current bid is quite hard to estimate, and plans may be tempted to offer bids that are significantly higher than their current costs in order to provide slack in future years.

Biased Selection. Caps on each plan's rate of premium growth allow for more diversity of premiums than do caps that set a flat level of premiums for all plans. Limits on premium growth effectively grandfather existing premium differences across plans into the limits. Plans that enter the system with high premiums can continue to charge high premiums, even if the premium limits are binding. Limits based on a level of premiums, by contrast, ignore any preexisting differences in premiums across plans. Plans that enter the system with high costs would be brought down toward the average if the limits were binding.

Limits on the level of premiums are problematical if differences in plans' costs largely reflect risk selection rather than other factors such as efficiency of operations. If that is the case, then limits on the level of premiums could unduly penalize plans that have attracted significant adverse selection. In effect, plans would be strongly disadvantaged for serving individuals with the greatest need for health care.

The importance of this will depend on the accuracy of the risk-adjustment process included in health system reform. The current state of the art in risk adjustment appears to capture relatively little of the variation in plans' costs, but improvements in risk adjustment or the inclusion of reinsurance or partial capitation might improve ability to account for differences in risk mix across plans (see Chapter 8).

Immediate or Standby

A second major consideration in designing a system of premium limits is whether to implement them immediately or only after some delay. Premium limits might be implemented, for example, only after competition or other cost-containment strategies have

been given adequate time to work. Premium limits would be imposed only if costs stayed above the targeted level.

Immediate implementation would generate the greatest regulatory pressure and would maximize the potential benefits of premium regulation discussed above. First, if effective, immediate limits would result in the greatest cost savings, especially scorable savings during the five-year horizon in budget scoring typically used by the Congress. Second, because expansion of coverage may depend on these savings, immediate limits might allow for more rapid expansion of health care coverage. Finally, any guaranteed maximum on payments could be implemented immediately.

On the other hand, as discussed in the previous section, it will be quite difficult to forecast the actual level of premiums during early years of reform. Immediate implementation of premium limits greatly raises the risk of disrupting service delivery relative to a strategy of waiting until accurate premium information becomes available. If competition and other cost-containment strategies would require some years to become effective, early implementation could stifle the gains from competition.

Finally, standby implementation might create either larger dislocations or smaller total savings than would immediate implementation. If costs continue to rise, standby implementation would allow the gap between actual and target premiums to widen. When the limits were triggered, this could create a choice between either imposing large reductions in premiums or failing to recoup all the excess expenditures that occurred prior to implementation of the limits.

State or National Targets

A final consideration in the design of premium limits is whether to pool states under a single national limit or to set independent state limits. One approach is to let each state have a premium limit that is independent of all other states. Under that approach, each state would have its own annual limit, and there would be no sharing of savings across states. States would "bank" any savings below targets to allow excess spending in later years.

An alternative approach would be to pool the states and the state limits under a single national premium limit. If national spending were below the target, no state premium limits would be imposed. If spending were above the target, however, state limits would be imposed that were just sufficient to bring total national spending below the target. In effect, savings in states below their respective targets would offset part of the excess spending of states above their targets.

States could be pooled under a single national target in a variety of ways. One approach would be to allow state targets to be somewhat elastic with regard to actual state spending. For example, the premium reduction in a state exceeding its limit could be made proportional

to the excess expenditures in that state. States with very high premiums could spend in excess of their targets to the extent that there were offsetting savings in states below their targets. An alternative approach would not allow actual spending in a state to affect the premium limits. Any expected savings in states below their targets would be used to set uniformly higher targets across the board, and actual spending could not exceed the target in any state.

The state and national approaches to premium limits differ along at least three dimensions. First, premium limits would be more likely to be triggered under separate state limits. Even if the national spending target were met (so that a national limit would not be triggered), some states would be likely to exceed their individual targets due to the volatility of spending growth across states. Second, separate state targets would guarantee a maximum spending level in each state, while pooled national targets would not. There would be no limits on spending in any state if national goals were met. Finally, separate state targets would provide stronger incentives for cost containment. Under a national limit, excess spending in one state could be offset by reduced spending in other states, diluting incentives for cost containment.

Summary: Description of a Model System of Premium Limits

Premium limits present a difficult trade-off between the benefits of cost containment and the risk of disrupting both the normal competitive process and the delivery of health care. If premium limits are implemented, they should therefore be approached cautiously. To the greatest extent possible, current uncertainties should be allowed to resolve themselves before limits are imposed. These include availability of information on the level of costs and premiums that will prevail in a reformed health care system, as well as the effectiveness of other cost-containment policies such as competition, medical education policy, technology assessment, and malpractice reform.

This clearly argues for structuring premium limits as a standby or backup approach to cost containment. Limits should not be implemented until competition and other policies have had time to work and then only if national spending continues to exceed targeted goals.

Yet, to be effective, limits must reach down to the individual states or market areas where plans operate. A single national target would neither guarantee a maximum level of spending in individual states nor provide strong incentives to plans in any one market area.

In addition, limits should be structured to reinforce competition and other cost-containment forces. This requires that premium limits should set a level of premiums rather than an allowable rate of premium growth for individual plans. This would give efficient plans an advantage over inefficient ones and would discourage plans from trying to game the system with very high bids. If implemented, premium limits should move to limits based on premium levels as soon as adequate risk-adjustment formulas have been implemented.

A model system of premium limits that met these criteria could be structured in the following way. A baseline year (1993, for example) would be chosen. For each subsequent year, targets for each state and the nation as a whole would be calculated from base year spending plus a nationally uniform allowable rate of growth. Initially, those targets would be merely informative, allowing each state and the nation as a whole to track performance relative to the premium limits. This would also allow time for plans to adjust to health system reform, and for risk adjustment mechanisms to be developed and implemented.

At some point (the year 2000, for example), premium limits would be put into effect. If national spending in that year were below the target, no limits would be put into place. If national spending exceeded the target, each state would face its own individual target, with the state targets anticipated to bring total national spending back to the targeted level. A transition period of perhaps three years would be used to avoid sudden dislocations in spending, with limits set to move premiums smoothly down to the targeted levels by the end of the transition. At the end of the transition, national spending would match the targeted level.

In all cases, the targets for individual states would translate into targets on the level of plans' premiums. These could be implemented by specifying an absolute maximum premium in each state. Alternatively, they could be implemented by specifying an average premium in each state and reducing premiums for plans in excess of the average in states that exceed their targets.

PREMIUM LIMITS IN THE ADMINISTRATION'S PROPOSAL

In broad outline, the Administration's proposal sets a premium target for each alliance, starting in 1996. Targets are based on actual 1993 premium levels in the alliance, inflated by an allowable rate of growth. If the average premium in the alliance is below the target, nothing further happens. The alliance merely banks the difference between the actual and target premium level to allow for a somewhat higher rate of premium growth in later years. If the average premium in an alliance exceeds the target, however, some plans within the alliance take mandatory premium reductions to bring the alliance average premium down to the targeted level. The plans whose premiums are reduced are those with the highest rates of premium growth.[4]

Calculating the Premium Targets

Estimated 1993 premium levels are the starting point for the Administration's premium limits. A national board would estimate what 1993 premiums would have been in each

[4] Reductions in the first year of alliance operation are different, however. In the first year, plans with high premiums (not high premium growth) face the reductions.

alliance area if all eligible individuals had the standard benefit package.[5] These premiums take into account the current level of spending in each area, then adjust for factors such as current variation in benefits and the proportion of the population that is uninsured. Copayments, premiums for supplemental benefits, and other out-of-pocket costs are not included in (or subject to) the premium limits.

These estimated 1993 premiums would be based on at least three sources of data. Medicare data would be used to provide baseline information on practice variation and spending levels across areas. State-level spending estimates from HCFA's Office of National Cost Estimates would provide all-payer estimates at the state level. Finally, as noted above, HCFA is currently fielding a major survey of premiums and coverage for employers and insurers to provide detailed premium data across the United States.

The 1996 premium targets allow for a roughly 6.5 percent per year growth in premiums between 1993 and 1996. Each alliance's 1996 target would be based on estimated 1993 premiums plus an allowance for premium growth. The maximum allowance for premium growth is 15 percent between 1993 and 1995, and the consumer price index (CPI) plus 1.5 percent between 1995 and 1996. This averages to a roughly 6.5 percent per year premium growth between 1993 and 1996.

Premium targets in subsequent years are allowed to grow slightly faster than the rate of inflation. The allowable premium growth ranges from the CPI plus 1.0 percent in 1997 to the CPI in 1999.[6]

Some adjustment in individual alliance targets may be possible. First, allowances are to be made for variations in population growth and changes in demographics across alliances. For example, an alliance with a rapidly aging population would receive slightly higher targets. Second, and perhaps more important, the Administration's proposal calls for the Congress to consider eliminating regional variations in premiums due to variation in practice patterns by the year 2002. An advisory commission on regional variations would be established to make recommendations to the Congress. The Congress would have 60 days to vote down such recommendations or they become law.

Enforcement of the Targets

In each alliance, the weighted average premium (weighted by the enrollment in each plan) must be at or below the premium target. Enforcement takes place by soliciting premium bids from plans, calculating the weighted average premium, and mandating premium reductions for some plans if necessary.

[5] Medicare, for example, is excluded.

[6] These allowable rates of growth are cumulative. An alliance with premiums below the target in one year banks the savings and can spend the savings on a higher rate of premium growth in subsequent years.

In the first year of operation, the alliance solicits bids from plans.[7] To forestall gaming, the alliance has the option not to disclose what the alliance premium cap is until after bids have been submitted. After negotiation, these bids are termed "accepted bids." The National Board takes the accepted bids and calculates the weighted average accepted bid for the alliance based on an assumed distribution of individuals across plans.[8]

If the weighted average accepted bid is at or below the alliance's limit, each plan simply receives the premium that it bid. No further action is taken, and there are no limits on any plan's premium.

If the weighted average accepted bid exceeds the alliance's limit, however, the situation is much more complex. The National Board calculates the maximum complying bid for each plan—the bid above which the plan is subject to a premium reduction. Plans that bid in excess of their maximum complying bid have their bids reduced by some portion of that excess. Plans must accept these reductions as a condition of participation in the alliance.

In the first year of alliance operation, the maximum complying bid is the same for all plans in an alliance and is equal to the alliance's premium target. In subsequent years, however, plans have different maximum complying bids. Each plan's maximum complying bid is based on its final (post-reduction) premium in the previous year plus an alliancewide dollar amount.[9]

Calculation of each plan's reduction is complex but boils down to reducing the bid of each noncomplying plan just enough to bring the average bid in the alliance down to the premium target. For example, if the alliance's bids would result in $1 million of excess spending, and the noncomplying plans in the alliance would have exceeded their allowable spending by $3 million, then each noncomplying plan's bid is reduced by one-third of the excess between the actual bid and that plan's maximum complying bid.[10] In effect, because enforcement is based on the alliancewide average premium, the savings from plans with low bids partially offset the excess bids of plans with high bids.

Under this system, if an alliance is below its target premium, new plans may enter the alliance at any level of premiums. If, however, the alliance is a noncomplying one whose weighted final bid exceeds its target, new plans may only enter with premiums at or below

[7] Alliances may start operation in 1996 and must start operation by 1998.

[8] Differences between actual and assumed patterns of enrollment will introduce errors in this calculation. These errors are recouped in later years when actual enrollment is known.

[9] Because the inflation is a flat dollar amount, low-cost plans are allowed a slightly higher percentage premium growth than high-cost plans.

[10] Total excess spending for the noncomplying plans is always greater than (or equal to) total excess spending for the alliance because at the alliance level the savings from plans that bid less than the maximum partially offset the excess bids of the noncomplying plans.

the target premium. Alliances are supposed to prevent old plans from exiting and reentering the market as new plans. The alliance can make exceptions to this rule to encourage availability of all types of plans or to spur entry.

Comments on Details of the Administration's Proposal

Several facets of the Administration's proposal appear compatible with competition. The proposal allows for significant variation in premiums across plans, and for some plan discretion in pricing even when the limits are imposed. Further, the limits are structured to be binding only when entire areas would on average exceed the limit. This is, in effect, as loosely structured as the limits can be while still guaranteeing a limit on outlays for the average person in each market.

Two aspects of the proposal, however, are significantly at odds with the Commission's recommendations in this area. First and most obviously, limits on each plan's premium growth could have unanticipated side effects, including disadvantaging efficient plans and inviting plans to game the system through high initial bids. Limits would be better structured in terms of setting the level of premiums rather than setting each plan's premium growth.

Probably the most significant criticism of the proposal, however, is that the limits are quite likely to be imposed very early in the process of health care reform. If historical expenditure patterns persist under managed competition, expenditure limits are likely to be binding in many alliance regions.

The overall rate of allowable premium growth is on the low side of recent historical standards. Premiums are allowed to grow roughly 6.5 percent per year from 1993 to 1996, or about 3.5 percent above the rate of inflation. Any excess growth during that period is recaptured at once in 1996 (for alliances beginning operation in 1996). The allowable growth after 1996 will depend on general inflation but is probably somewhat lower than 5 percent per year.

Recent cost growth in the United States has exceeded that level. Between 1980 and 1989, annual growth in employers' spending on health insurance premiums exceeded inflation by an average of 6.7 percent (Gabel et al. 1991). Average premiums are estimated to have grown between 7 percent and 9 percent in 1993 or roughly 5 percent above the rate of inflation (KPMG Peat Marwick 1993). The allowable growth in the alliance baselines from 1993 to 1996 represents real (inflation-adjusted) growth several percentage points below these historical levels.

Variation in expenditure growth at the state level may trigger the expenditure caps even if national outlay growth is below the caps. The premium limits are applied to each alliance separately. Historical data show significant variation in expenditure growth across states. If this historical variation were to persist, some states would be above (and others below) their respective limits even if the national premium growth target were met.

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CHAPTER 4

SETTING PAYMENT RATES FOR PROVIDERS

Under some reform proposals, setting payment rates for providers would be the principal strategy by which costs are controlled. Whether imposed on existing private plans or applied in a public fee-for-service plan open to all Americans, rate setting—when combined with a mechanism to address volume increases—provides one way to meet spending goals. The Commission analyzed these approaches to reform in depth last year in a report to the Congress on expenditure limits, *Expenditure Limits: Design and Implementation Issues* (PPRC 1993b).

Whatever the approach to contain costs under health system reform, the Commission contends that fee schedules should play a central role in structuring fee-for-service payments. The Commission has developed a set of recommendations outlining its approach to the use of fee schedules and rate setting in health system reform. Some of the recommendations are contingent on how the Congress chooses to enforce expenditure limits.

RECOMMENDATION

A uniformly applied resource-based relative value scale built on Medicare's should be the basic payment methodology for paying for all professional services delivered in fee-for-service plans and in the out-of-network segments of managed-care plans. Modifications should be made to Medicare's relative value scale to make it applicable to all payers and services.

Provider payment rates should be updated through a process of negotiation or consultation that works toward achievement of cost-containment goals. A formula similar to the Medicare Volume Performance Standard that considers prior-year spending should serve as a starting point for the decision process. Physicians as a group should share, in a limited way, the bonuses and penalties for changes in the volume of hospital admissions, laboratory tests, prescription drugs, and certain other types of services. Payment levels should be set initially to be revenue-neutral for Medicare and private payers, but a goal should be set to phase out differences between Medicare and private payment rates over a period of years.

If premium limits are activated, the update of the fee schedule's conversion factor should be guided by the level at which plans with fee-for-service components would be better able to comply with budget targets.

Physicians' charges should be limited to a fixed percentage amount above established fee schedules. Physicians who choose to balance bill within these allowed amounts should disclose their balance billing percentage on an annual basis. This percentage should be applied to any service for which there is a balance bill. Low-income individuals who are eligible for premium subsidies should be exempt from any balance billing.

If expenditure limits are used to update provider payment rates, (1) relatively few categories of services should be established (e.g., inpatient hospital, outpatient hospital, and physician); (2) separate historical baselines should be established for each category based on trends for the years prior to the enactment of reform; and (3) a process should be established for tracking substitutions across categories.

Health plans should be permitted to offer a point-of-service option but should not be required to do so.

This chapter first focuses on issues related to establishing and updating fee schedules for physicians' services. It describes why a national resource-based relative value scale (RVS) should provide the basis for payment for all professional services delivered in fee-for-service arrangements. These include those services delivered (1) under fee-for-service plans, where any physician may be reimbursed by the plan and may not be denied the right to participate in that plan; and (2) outside of the network arrangements used by health maintenance organizations (HMOs) and preferred provider organizations (PPOs). If a HMO or PPO health plan contracts to pay certain physicians on a fee-for-service basis, however, the plan would not be required to use the national RVS as the basis for its payments.

Development of a national RVS for physicians' services should start from Medicare's RVS and incorporate certain critical modifications and refinements. These include adoption of a resource-based method for valuing the practice expense and professional liability insurance (PLI) components of the fee schedule, as previously recommended by the Commission, and refinements to the relative values for services not normally part of Medicare's benefit package (see Chapter 20).

The chapter then discusses the Commission's recommendation to place limits on balance billing. The next section of the chapter looks at how payment levels under these fee schedules should be determined. Specifically, it considers how to set a conversion factor and how to account for volume, so that fee schedules can support cost-containment goals. It also looks at the role that negotiation or consultation could play in this process.

The chapter then reviews previous Commission work on a broader all-payer rate setting strategy. Several key issues are addressed, including how to set provider rates in different health sectors, how to address the substitution of services across sectors, and whether

physicians should be held responsible for volume changes in certain other sectors. Finally, the chapter discusses the role of point-of-service (POS) options for managed-care plans, including a requirement in the Administration's proposal that all health plans must include a POS option.

ESTABLISHING UNIFORM FEE SCHEDULES

All health system reform proposals retain a role for fee-for-service payment for physicians and other providers, although that role varies considerably. Under some approaches, uniform provider fee schedules would be mandated for private-sector fee-for-service transactions. Several all-payer and single-payer proposals before the Congress make the establishment of uniform fee schedules a centerpiece, while the Administration's proposal uses fee schedules in a supporting role. Representative Stark's all-payer and Medicare-for-all bills call for a national fee schedule based on the Medicare Fee Schedule. By contrast, the McDermott-Wellstone single-payer bill and the Administration's proposal would not mandate use of any specific fee schedule. They would simply require that all physicians in a state or region base their charges on the same fee schedule and would leave its design to states or purchasing alliances. All these proposals would restrict physicians from charging enrollees anything over fee schedule amounts.

The Commission recommends that fee schedules play a central role in cost containment under any approach to reform (see Chapter 2). Furthermore, it recommends that Medicare's relative value scale be the basis for uniform fee schedules. In general, fee schedules include both a relative value scale that states how much one service is worth relative to another and a conversion factor that translates those relative values into dollars. Various adjusters or bonuses may also applied to a basic fee schedule. The relative value scale and the use of geographic adjusters and bonus payments are described in this section, while different approaches to setting the conversion factor are discussed in the next section.

Benefits of Fee Schedules

There are several benefits inherent in using fee schedules with limits on physicians' charges. First, they offer a systematic approach to payment in contrast to the continuing use of historical charges and fee screens by many insurers. Fee schedules based on historical charges are characterized by wide payment differentials among procedures, localities, specialties, and sites of care that cannot be explained by differences in the costs of practice. Medicare's fee schedule reduced these differentials by realigning the pattern of relative payment to physicians to reflect the costs associated with providing a service.

Second, they can reduce administrative complexity. Compared with charge-based systems where payments are based on a set of fee screens, each updated separately, fee schedules are much simpler for beneficiaries and physicians to understand. Carriers would no longer need to calculate screens.

Fee schedules also help make payments more predictable for physicians, consumers, and payers. If limits on charges are included, consumers are assured a degree of protection from financial liability. Once a conversion factor is set, plans and policymakers are assured that total expenditures will be fairly predictable, thus offering a framework for cost containment.

Basis of the National Relative Value Scale

Since 1992, Medicare has paid physicians according to a fee schedule that bases payment on the resources required in providing a service. It was developed with the goals of ensuring equity in payment and eliminating incentives for physicians to perform one service over another. Under system reform, a national relative value scale should be developed that starts with Medicare's RVS to take advantage of all the work already undertaken on it. Based on considerable research, evaluation, and refinement, Medicare's RVS is gaining broader acceptance. In addition, the Health Care Financing Administration (HCFA), through its refinement process, has strived over the last few years to improve the accuracy of the scale's relative value units. For 1993, for example, HCFA changed the relative work values of some 400 services thought to be incorrect in the original Medicare Fee Schedule (PPRC 1993a).

Mandating use of a national relative value scale is not likely to face significant resistance, given that Medicare's RVS has already been adopted by many other public and private payers and physicians have become familiar with it. As of February 1994, 12 state Medicaid programs used fee schedules with payments based on published Medicare relative values, and 8 additional states have decided to follow suit in the near future. Movement toward use of resource-based payment by private payers has also accelerated as implementation and refinement of the Medicare Fee Schedule has progressed (see Appendix A for a further discussion of these trends).

The need for accuracy in the fee schedule's RVS increases in importance as more payments are based on it. First, to make Medicare's RVS applicable to all payers and services, HCFA should continue its refinement process. Refinements should be made to the relative values for those services not normally part of Medicare's benefit package, such as preventive services and services unique to children. HCFA is currently refining relative values for some of these other services. Second, the Congress should mandate that resource-based practice expense and PLI values be incorporated into the national RVS, as recommended by the Commission for Medicare, to replace the current system of historically derived practice expense and malpractice expense payments (see Chapter 20).

In order for the national RVS to be accepted by physicians, this refinement process should be open and include physicians in its development. As the Commission recommended in its *Annual Report to Congress 1993*, this process should include mechanisms to promote consistent decisions, fair methods and representation of involved parties, means to identify overvalued as well as undervalued services, and ways to ensure public accountability (PPRC 1993a).

Once refined to be applicable to all payers and services, the national RVS would serve as the basis for fee schedules used around the country. The Commission recommends that, in any state or region, only one conversion factor should be applied to the national RVS. To do otherwise runs the risk of distorting the scale's relativity and adversely affecting incentives for more effective medical practice.

Although the relative value units in the national RVS could not be altered, bonus payments could be incorporated to address access concerns related to certain services. Obstetricians, for example, could be in short supply in one part of a state, and bonus payments might be used to attract them there (see Chapter 22).

Finally, fee schedules should be adjusted to vary payments to physicians in different geographic areas to account for higher or lower costs of practice. Under the Medicare Fee Schedule, this is accomplished by applying a geographic practice cost index (GPCI) to national average fee schedule payment amounts based on a set of localities.[1] Those entities establishing fee schedules under reform may prefer not to use Medicare's geographic boundaries and GPCIs. In that case, they may choose to account for variations in costs for each distinct subregion by using different geographic adjusters, perhaps using data collected by HCFA for calculating the Medicare GPCIs.

Balance Billing

If no limits are imposed on physicians' ability to bill their patients additional amounts beyond those specified by the fee schedule, some sick or poor patients might face a substantial financial liability. In addition, relative payment could be distorted, undermining the principles on which the relative value scale was created. The Commission has historically supported an approach for Medicare where a limit was placed on balance billing. Under current Medicare policy, charges are limited to a fixed percentage amount (15 percent) above Medicare Fee Schedule payment levels.[2] By contrast, Medicaid prohibits any balance billing. The Commission recommends that a limit be extended to fee-for-service transactions under health system reform, although the limit may not be the same as Medicare's.

The Commission's decision to support a limit on balance billing under the Medicare program was based on a judgment that the market for physicians' services does not function well enough to preclude the need for financial protection for Medicare beneficiaries. Without such limits, the Commission feared that beneficiaries' costs would increase and access might

[1] The boundaries for these localities reflect historical decisions that may be revised in the future. In its *Annual Report to Congress 1991*, the Commission stated that the current Medicare localities are not the best basis for geographic adjustment of the fee schedule and proposed a policy under which most localities would be statewide, but where a few states would have multiple localities based on metropolitan statistical area population categories (PPRC 1991).

[2] Because nonparticipating physicians are paid only 95 percent of the fee schedule amount, the effective charge limit is 109.25 percent of the amount paid to a participating physician.

suffer. At the same time, the Commission viewed some allowance for balance billing as a safety valve to ensure that physicians who did not perceive Medicare fees as adequate would continue to treat Medicare patients. In addition, no matter how much care is taken in developing and refining the fee schedule, there were concerns that some fee schedule amounts might not precisely reflect resource costs. Rapid changes in technology, for example, may increase costs for a certain procedure more quickly than those costs can be incorporated into the fee schedule.

Some reform proposals, including those by the Administration, Wellstone and McDermott, and Stark, would prohibit balance billing for all transactions. The Commission's decision to allow limited balance billing reflects the concern, as with Medicare, that an allowance for balance billing may serve as a safety valve for physicians. The decision for Medicare was made at a time when, through the so-called cost shift, non-Medicare payments provided a cushion in case Medicare balance billing limits were perceived as too low. Determining the appropriate amount of balance billing under system reform may depend on the degree of constraint that is applied to private payments.

Although the Commission's policy would allow limited balance billing, it would make exceptions. To ensure low-income individuals' access to the private fee-for-service sector, those who would qualify for individual premium subsidies under system reform should be fully exempt from balance billing, paralleling today's policy for Medicaid beneficiaries. Designation of eligibility could be encoded on the magnetic tape of beneficiaries' health care cards (or done in another nonburdensome way) so that providers would have the necessary information to bill appropriately (see Chapter 9).

An alternative to government-set limits on balance billing has been proposed by the American Medical Association (AMA) and the American Society of Internal Medicine (ASIM). It would allow unlimited balance billing, but in a framework of market competition that advocates argue would keep balance billing at acceptable levels. Under this approach, physicians and plans would set their conversion factors prospectively and make them readily available to consumers in an easy-to-understand format. A physician would set and publicly disclose one conversion factor that would apply to all services. A regional directory might show each physicians' conversion factor, their health plans' conversion factors, and the effective balance billing percentage. To limit their financial liability, consumers would be able to use this information to select physicians whose conversion factors would result in low balance billing. Physicians would thus face market pressures to select conversion factors that were competitive with their colleagues. Rather than through government rules, consumers' financial protection would be met through their selection of providers (Nelson 1993; Todd 1993; Reinhardt 1994).

The Commission has encompassed one key feature of the AMA/ASIM proposal as part of its recommended policy on balance billing. Physicians who choose to balance bill within allowed amounts should disclose their balance billing percentage on an annual basis. This

percentage should be applied to any service for which there is a balance bill. The Commission's position departs from that proposal by requiring that all plans in an area without contracts with their providers use the conversion factor established for that area. It also differs by imposing an overall ceiling on the allowed balance billing percentage—in the terms of the AMA/ASIM proposal, a limit on the conversion factors that physicians choose.

Although the AMA/ASIM approach uses competing conversion factors to encourage cost containment, it runs the risk of recreating the distortions in the pattern of fees that motivated Medicare payment reform. Although most physicians share some common services, mainly visits, most other services are delivered primarily by certain physician specialties. For example, most surgeons in an area could select a conversion factor that is substantially above that of primary care physicians. Market forces might fail to overcome this trend, because the two groups of physicians generally do not deliver the same services.

SETTING PAYMENT LEVELS: CONVERSION FACTORS AND COST-CONTAINMENT GOALS

The conversion factor provides the linkage between the fee schedule itself and budgetary considerations. In Medicare, the Congress has the authority to update the conversion factor, although it sometimes allows a default formula based on the Medicare Volume Performance Standard (VPS) to take effect. Under the VPS system, the annual conversion factor update is lowered when volume grows faster than the target rate and raised when volume growth is below the target. In 1993, the Congress chose to reduce the update that would have resulted from the default formula in order to meet broad federal budgetary goals. In the two previous years, the default formula was applied. The updates to the conversion factors were lower than inflation because volume growth exceeded the VPS (with the exception of surgical services one year).[3]

Under health system reform, a similar linkage should be established. The Commission recommends that provider payment rates should be updated through a process of negotiation or consultation that supports achievement of cost-containment goals. A default formula similar to the Medicare Volume Performance Standard that considers prior-year spending would serve as a starting point for the decisionmaking process. If premium limits are used, however, a default formula that considers prior-year spending may be unnecessary.[4]

[3] Medicare currently uses three conversion factors, because of congressional decisions to create separate VPSs and updates for surgical services, primary care services, and all other services (see Chapters 20 and 21).

[4] This linkage of the conversion factor to budget targets is more explicit than the Administration's proposal, where alliances would be required to establish fee schedules but where no guidance is provided on how payment levels might be set.

Accounting for Volume in Setting Payment Levels

Reforms that do not use premium limits offer several approaches to setting rates for physicians and addressing changes in the volume of services. These reforms include all-payer rate setting, single-payer proposals, or proposals that would offer a single public fee-for-service plan in competition with managed-care plans (see Chapter 11). Options for addressing volume in reforms that rely on premium limits are described in the next section.

Setting payment rates is complicated because volume is the principal factor driving spending for physicians' services. For Medicare, payment rate increases totaled less than 4 percent from 1986 to 1993, while volume per beneficiary increased roughly 50 percent (see Chapter 21). Ways to address volume changes include:

- an annual policy decision with a backup formula that incorporates an adjustment for prior-year spending that diverges from the target;
- an annual policy decision without any explicit reconciliation of prior-year spending;
- expenditure caps or withholds that attempt to guarantee that the expenditure limit is met; and
- structured systemwide negotiations between payer and physician representatives that address how a target is to be met (with or without an explicit reconciliation of prior-year spending).

These approaches, which were described more fully in the Commission's report on expenditure limits, vary considerably in the incentives created for physicians and in the certainty that budget targets will be met (PPRC 1993b). Withholds, used in various Canadian provinces and in Germany, have not proved popular in this country and are not discussed in this report.[5] The role of negotiations is discussed later in the chapter.

The simplest approach is to set the fee schedule's conversion factor at a level designed to help plans meet budget goals or expenditure limits. Whether through provider negotiations or by the decision of policymakers after consultation with providers, the conversion factor would be updated annually to reflect the goals or limits for a particular region. This approach takes volume changes into account only by projecting the spending that will result from a particular conversion factor, but has no way to make up for inaccurate projections of volume changes. Making these projections, however, is not a straightforward exercise, because physicians have

[5] A limited application of this approach would be permitted under the Administration's proposal in the case where an alliance or a state chose to impose prospective budgeting on fee-for-service plans.

substantial control over the services they deliver. If fees are lowered, some physicians may recommend additional visits to their patients, order extra tests, or suggest clinical procedures when indications are borderline.[6]

The Commission has concluded that Medicare's VPS approach—a default formula to adjust fee updates for spending that varies from approved targets in a prior year—is best able to meet budget and other objectives in reforms that avoid premium limits. Policymakers or negotiators would still be expected to take predicted volume changes into account in setting the conversion factor. But they would rely on the VPS mechanism to make corrections when the volume of services rises more or less than predicted.

In addition, mechanisms like the VPS are intended to provide a collective incentive to the profession to control use of services. Concerns have been raised whether the VPS provides adequate incentives to constrain volume, and changes have been proposed to strengthen these incentives.[7] Whether volume increases are ultimately slowed depends on the concurrent effects of other mechanisms, such as utilization review, profiling, an infrastructure that supports more efficient and effective practice, and policies that limit capacity (i.e., physician supply and advanced technology).

A mechanism that adjusts for prior-year spending can guarantee that budgets are met, although not necessarily within each year. Current data systems allow adjustments to be made two years later if government estimates of the payment level needed to meet a limit are inaccurate or providers' volume responses vary from expectations.[8] This approach also has the potential to impose relatively unambiguous incentives on providers, collectively if not individually. If volume is not controlled, providers can count on a downward adjustment in payments, unless the Congress intervenes on their behalf.

For the payment of physicians by Medicare, the key to making rate setting work seems to be the presence of both the default formula and the ability of the Congress to override it. The formula strengthens the collective incentives that physicians face by adding an element of certainty to the rate-setting decision, while the Congress retains the ability to make adjustments that reflect either current political dynamics or changes in the practice of medicine that may be hard to build into a default formula.

[6] See Chapter 12 of the Commission's *Annual Report to Congress 1993* for empirical evidence of increased volume in response to fee cuts (PPRC 1993a).

[7] For an analysis of various proposals to strengthen the incentives in the Medicare VPS, see Chapter 21 of this report and Chapter 13 of the *Annual Report to Congress 1993* (PPRC 1993a).

[8] The method used in Germany accelerates the timing of the adjustment by comparing volume growth in the first two quarters of the year to a target. If growth is above or below the target, the conversion factor for the third and fourth quarters is adjusted accordingly. The German system also tries to sharpen the incentives by profiling physicians. Physicians who are significantly above average may be audited or asked to return excess inappropriate payments (Henke et al. 1993; Reinhardt 1993).

Accounting for Volume in a System Relying on Premium Limits

When premium limits serve as the primary enforcement mechanism for expenditure limits, as in the Administration's reform proposal, rate setting serves in a complementary role. As such, the process for updating conversion factors should be designed to help plans meet their premium limits.

Fee-for-service plans without provider contracts are likely to have particular difficulties in meeting premium limits because they lack the leverage to impose a fee schedule on their own. The fee schedule, in combination with utilization review, profiling, or other measures aimed at controlling volume, should help these plans stay competitive. Network plans and HMOs, through their provider contracts, would have other means by which they could reduce spending levels and keep their premiums in line with budget targets.

A system that relies on premium limits gives the ultimate responsibility for controlling volume over to the individual health plans. Whereas a VPS mechanism is critical in a rate-setting system that has no other mechanism for addressing volume, it is probably unnecessary if premium limits hold plans responsible for controlling volume. The VPS is a retrospective mechanism that makes its adjustment for increased volume several years after the fact, whereas premium limits ensure that adjustments are made prospectively.

The remaining question is what happens when plans without network contracts have difficulty meeting premium limits, even with the fee schedule's conversion factor set at a level designed to help them comply. If payment levels are too high, plans that believed they were operating efficiently and without excessive profits would argue that they lacked the tools to meet a premium limit.

One option for addressing this concern is set forth in the Administration's proposal, where those health plans whose premiums are reduced to bring them into compliance with premium targets could recapture the amount of those reductions from providers. Provider payments would be reduced prospectively in those plans by the same percentage the plans face in a premium reduction (as adjusted by an induced volume offset).[9] This provider-payment reduction is designed to give plans a fair chance to meet their targets without suffering significant losses.

This option may have the effect, however, of creating separate conversion factors for different plans based on whether they are projected to meet specific targets. Physicians, including some who had contracted with a PPO for a certain conversion factor, would see their fees

[9] Plans that have contracts with providers, including HMOs that use salaries or capitation to pay their physicians, must include provisions in the contracts to permit reduced payments under this provision. Noncomplying plans have the option to reduce their premiums voluntarily; if they do so, provider payments are not reduced, but the plans are listed in the open season for enrollment at the reduced premium.

reduced for reasons mostly outside their control. This option might also be seen as absolving plans of responsibility for failing to meet their budget targets. By passing the assessment on to providers, plans are relieved of any incentive to find savings through reductions in administrative costs or in inappropriate care.

Differential Payment Levels for Medicare and Private Payers

A particular issue in any system that sets rates is whether all payers should be required to pay at the same level, that is, use the same conversion factor for paying physicians. Currently, substantial differences exist in the levels of payments made by different payers. Medicare pays about 59 percent of what private insurers pay, and Medicaid programs on average pay about 73 percent of Medicare rates (see Chapters 17 and 18). The Commission has recommended that, if the Medicaid program is continued under health system reform, payment rates should be raised to Medicare levels (see Chapter 9).

This gap between the payment levels used by Medicare and by private payers is a concern to the Commission, because it has been growing and may affect physicians' future ability or willingness to serve Medicare beneficiaries. The Commission recommends that conversion factors for private payers be set initially at the current level used by private payers. This would preserve at first the current payment differential between Medicare and private payers. The goal, however, should be to phase out the difference between the conversion factors over a period of years, ideally setting it at a weighted average between the two. This change could be accomplished by both raising Medicare fees and limiting increases in private-sector fees. This goal has federal budget implications and would assume that Medicare succeeds in achieving control over volume. The important element here is that the system would be designed so that neither Medicare nor the new publicly administered plan would become a second-tier plan with lower fee levels that could create access barriers, as experienced in today's Medicaid program.

PROCESS FOR ESTABLISHING FEE SCHEDULE PAYMENT LEVELS

Whereas the previous section focused on the criteria for setting payment levels, this section looks at the process. Wherever discretion is involved in establishing the conversion factor and bonus payments, multiple parties will have an interest in influencing these decisions. Purchasers of health care will want payment rates kept down, while physicians will seek fee schedule amounts high enough to be considered adequate payment. Other practitioners, such as nurses, podiatrists, or chiropractors, whose payments might be tied to physician fee schedules, also would want to be involved. All participants may want to see fee schedules established at a level that keeps fee-for-service plans competitive with managed-care plans and ensures access for enrollees. In addition, if expenditure or premium limits are in place, health plans will want payment levels that allow their total expenditures to be less than their premium revenues.

Two types of processes could be used to select the conversion factor and, if needed, bonus payments: (1) formal negotiations with a provision for arbitration should negotiations fail, and (2) consultation, similar to that used to establish and refine Medicare's relative value scale. Some proposals before the Congress that include a role for physicians in the establishment of fee schedules under system reform use the term "negotiation" but provide little detail about how negotiations would take place. A more accurate term for these negotiations might be "consultations" since the entities establishing fee schedules would be obliged only to consider the views of physicians.[10]

Formal Negotiations

Formal negotiations over a fee schedule's conversion factor and bonus payments could take at least two forms. One approach would be to hold government-supervised negotiations between those providers and health plans that will use the fee schedule. Another approach would have the government or another entity (e.g., a regional alliance) negotiate with physician representatives to establish the fee schedule's conversion factor and bonus payments. In either case, there would need to be a provision for arbitration if the negotiations fail.[11]

Formal negotiations would ensure that physicians would participate in all stages of updating the conversion factor. A conversion factor could not be selected unless it had the approval of the physicians' representatives or unless an arbitrator set it. Those representing the government would base their negotiating position on the budget target for that year. Parties might differ over what level of conversion factor would best help plans meet spending goals or expenditure limits.

With regard to physician representation, it would be difficult for negotiations to be undertaken with multiple organizations, such as different specialty groups. Because this process would likely require the selection of a single organization for a geographic region to represent physicians in negotiations, it is possible that some physicians might not believe they were being adequately represented.[12]

One way to address this concern could be to create a new physician organization whose responsibility would be to represent providers in negotiations, following the German model.

[10] By comparison, a proposal introduced in the 102nd Congress would create a process closer to true negotiations. Under Senator George Mitchell's proposal (S. 1227), a national board would establish and oversee a process for negotiation of national payment amounts. The agreed-on rates would be binding on all providers and purchasers if and only if (1) the majority of the provider-negotiators and a majority of the purchaser-negotiators agreed and (2) the national health board concurred that these recommendations would achieve expenditure goals.

[11] In Canada, provincial physician associations negotiate with the provincial governments over updates in fee schedule rates and related issues. Because the provinces run single-payer systems, there are no health plans involved (Lomas et al. 1989).

[12] Senator Mitchell's bill would have established an organization as exclusive negotiator if it received authorization from 50 percent of all physicians, but multiple organizations could be approved if they obtained authorization from at least 25 percent.

In Germany, associations of sickness fund physicians not only negotiate with sickness funds on conversion factors, but also perform functions such as utilization review and claims payment. The associations represent all physicians in negotiations with sickness funds; membership is mandatory (PPRC 1991).[13] In the United States, all physicians in a geographic area could be required to join such a new organization, and they would be represented in negotiations by that organization. Its task would be to negotiate a fee schedule that would benefit as many physicians as possible.

Even if the issue of representation can be resolved, a formal negotiation process still makes it difficult to involve the full range of stakeholders. Health plans would want to ensure that payment levels are consistent with their financial resources, while the government would be seeking to control overall system costs. At the same time, other practitioners would want to be involved. A negotiation process that includes all stakeholders in the process could become very cumbersome and might not serve the interests of any.

Consultative Process

A process of consultation under health system reform could be far more flexible than formal negotiations. It could more easily include multiple stakeholders, such as physician specialty societies; different types of practitioners (e.g., advanced-practice nurses); and fee-for-service health plans. Moreover, a variety of processes could be used, such as hearings, fact finding, a formal comment period, and advisory panels. In cases where fee schedules were established on the state or local level, the processes could be tailored to meet local needs.

This approach is well known in this country. The establishment and ongoing refinement of the Medicare Fee Schedule has shown how consultation can be used effectively. Before implementing the fee schedule, HCFA considered the input of various parties through both formal comments on proposed regulations and different panels. As refinement issues are contemplated, HCFA considers the recommendations of the American Medical Association's RVS Update Committee as well as representatives of other groups. Even legislative decisions on updates of the conversion factor reflect substantial consultation with the provider community.

This process, however, may not give physicians as large a role as they would like in the ultimate decisions about conversion factor and bonus payment levels. Although they would be called on to submit their views, they would not have direct influence over decisions.

ALL-PAYER RATE SETTING

Some members of Congress have a strong interest in the use of rate setting to enforce expenditure limits. The Commission drew several conclusions in its report on how rate setting

[13] Other organizations, in which membership is voluntary, deal with political, clinical, or educational matters.

should be used, and some of these conclusions are reiterated here (PPRC 1993b). They deal with how expenditure limits should be allocated to categories, how rate setting might deal with sectors other than physicians' services, and the treatment of managed-care plans under all-payer rate setting.

Allocation of Expenditure Limits to Categories

If rate setting is chosen as the primary enforcement mechanism, then it follows that national expenditure limits should be disaggregated into categories of services (e.g., hospital, physicians, and prescription drugs). There are both practical and policy reasons for doing this. Because payment methodologies generally vary by type of provider, it makes sense to calibrate those methods to an expenditure limit by category. From a policy perspective, separate expenditure limits would also help focus cost-containment incentives on particular groups of providers. Allocating expenditure limits to categories, however, poses significant technical challenges in determining accurate historical baselines. It also raises the concern that inappropriate categorization could lead to payment discrepancies or create inequities between different types of providers.

The Commission concluded last year that, if a system of expenditure limits and rate setting is adopted, relatively few categories should be established. Categories should be based on the need both to give incentives to groups of providers and to keep most substitution of services within, rather than across, categories (PPRC 1993b). Thus, for example, all physicians' services should be kept in a single category, consistent with the Commission's recommendations for maintaining a single conversion factor. Several factors may affect how categories are used in a system of expenditure limits. Categories might be created to give policymakers the ability to differentiate annual rate updates as well as to focus incentives on different types of providers. In addition, categories might be designed to protect certain types of services or to reduce inappropriate substitution of services.

The Commission also concluded that, to prevent inequities, expenditure limits for these broad categories should be designed with separate baselines that reflect historical patterns of spending for the years prior to the enactment of reform (PPRC 1993b). But these historical patterns may change as new technologies emerge or as appropriate substitutions occur across category lines. The substitution of lithotripsy for surgical treatment of kidney stones, for example, shifted services from the hospital to outpatient settings, and the introduction of ulcer medications in the 1980s eliminated many surgeries. Decisions on when changes are appropriate in either the categorization of services or the historical baselines will be difficult; improved data on substitution of services would allow policymakers to make informed judgments. A process should be established for tracking substitutions across categories.

Rate Setting for Sectors Other Than Physicians' Services

Expenditure targets may not be an appropriate mechanism for making decisions for all categories of services. They may be problematic for decisions on rates for inpatient or

outpatient hospital services because changes in service volume (e.g., the admission rate) are prescribed by physicians rather than by hospital administrators. Despite having tools to encourage those physicians with staff privileges to respond to the incentives of per-admission payment rates by limiting lengths of stay and ordering fewer tests, hospitals may lack the tools or incentives to encourage the medical profession to reduce admission rates.

Similarly, physicians generally order—but do not supply—such services as prescription drugs, diagnostic testing, laboratory services, and durable medical equipment. It may be inadvisable to hold pharmacists, laboratory technicians, or equipment suppliers responsible for volume increases that are mostly beyond their control. These providers could not constructively respond to reduce future volume.

One option for enforcing an expenditure target in these sectors is to create an incentive for physicians to control volume by applying a modest portion of the risk to physicians' fee levels. Thus, physicians would be held partially responsible for the volume of services that they order in these sectors.[14] A policy could be structured that places physicians partially at risk for hospital admission rates or the volume (but not the price) of prescriptions. This would presumably be done on a collective rather than an individual basis. For example, if the volume of prescription drugs rose by more than its target, a uniform reduction would be applied to the physician conversion factor. If volume rose more slowly than the target, physicians would be rewarded. This risk might be shared with the other providers (e.g., hospitals or equipment suppliers) that might also receive a penalty or reward based on performance relative to the standard.

Parallel Systems of Rate Setting and Premium Limits

Managed-care plans pose some difficult challenges for the design of expenditure limits enforced through rate setting. These organizations often contract with providers on the basis of units of payment other than inpatient cases or fee for service. Forcing these managed-care organizations to abandon their chosen payment mechanisms would not be advisable. The major policy decision, therefore, is determining whether and when to provide this flexibility to health plans.

The Commission has previously suggested a mixed system, where premium limits would apply to some plans and rate setting to others. The creation of parallel systems under a strategy of all-payer rate setting is just one example of the combinations of cost-containment mechanisms advanced by the Commission in Chapter 2 of this report.

This option would have the advantage of using the enforcement method most suited to each sector of the health care market. Managed-care plans have contracts with providers that

[14] Under the Medicare VPS system, for example, spending on laboratory tests is included with spending on physicians' services, but the mechanism does not update fee schedules for laboratory services.

should give them the ability to control prices and management tools that should allow them to control volume. They would thus be judged by their overall success in controlling premiums. Fee-for-service plans, which generally lack provider contracts and have only relatively weak management tools, would be assisted by external controls on volume and prices.

The major drawback of this approach is the need to distinguish between managed-care plans and fee-for-service plans. Possible criteria include specified types of provider contracts, federal qualification, and the requirements set for Medicare risk contracts; alternatively, plans could be allowed to select which type of cost-containment requirement they would need to meet.

POINT-OF-SERVICE OPTIONS FOR MANAGED-CARE PLANS

Traditionally, consumers who enroll in certain types of managed-care plans agree to exclusive use of providers who participate in the plan's networks. Some health reform proposals seek to broaden consumer choice by requiring that all managed-care plans incorporate a point-of-service option. The Commission agrees that consumer choice is a high priority, but it believes that adequate choice is available in most communities through fee-for-service plans and PPOs. It therefore recommends that health plans should have the option of offering a point-of-service option, but should not be required to do so.

The Commission contends that it would be important to monitor consumer choice to determine whether such a requirement should be added in the future. Other measures might also be included to preserve consumer choice. Under a system that uses an open season for enrollment and a lock-in period, rules might be considered that would allow people to choose a different plan after one month's enrollment. Consideration might also be given to permitting disenrollment from a health plan if an enrollee's primary care physician leaves the plan.

The Administration's proposal specifically states that all plans offering lower cost sharing (in general, HMOs) must offer enrollees the opportunity to obtain coverage for any items and services that are delivered by a provider who is not a member of the plan's network.[15] The bill also allows the plan to charge enrollees selecting this option an "alternative premium" to take into account such coverage. Although the bill does not explain this provision further, Administration spokespersons have indicated that a plan could still apply utilization review procedures to the provision of services under the point-of-service option. In effect, an enrollee could not use this option to obtain a service denied by the plan, but could only use it to obtain the service from a non-network provider.

[15] The Administration's working draft of September 7 took a different approach, stating that a low-cost-sharing plan may offer a point-of-service option with 40 percent coinsurance.

Point-of-Service Options under the Current System

Point-of-service options have been growing in popularity in recent years. Data published by the Group Health Association of America (GHAA) indicate that in 1993 one-half of all HMOs were offering a point-of-service option. Independent practice association HMOs were somewhat more likely than group-model or staff-model HMOs to do so. The number of people enrolled under POS options increased in 1992 by 50 percent to 2.3 million enrollees—about 6 percent of HMO enrollees (GHAA 1993b).

Other GHAA data indicate that most plans with POS options cover basic benefits both in and out of their networks, with the principal exception of well-baby care (70 percent of POS options cover this service only within the network). In addition, about one-third of HMOs cover prenatal care and prescription drugs only within the network. Plans with POS options nearly always charge higher cost sharing for out-of-network services. Most commonly, they assess 30 percent coinsurance for out-of-plan services and a $300 annual deductible. Typically, there is an out-of-pocket cost sharing limit in the range of $3,000 per year for individuals and $6,000 for families. Finally, premiums for POS options tend to be about 20 percent higher than for plans' standard packages (GHAA 1993a).

Policy Issues

The main argument on behalf of the POS requirement in the Administration's proposal is that—along with provisions such as the requirement that all alliances offer at least one fee-for-service plan—it guarantees that all consumers may choose their providers, regardless of the plan in which they enroll. This guarantee is also important to providers who believe that patients should have a choice of both plans and providers. The point-of-service option can also help to monitor consumer access and satisfaction, if high levels of out-of-network service use are viewed as a signal that network care may be deficient.

The principal arguments against the POS requirement are that it guarantees choice beyond what is necessary, especially given that POS options are becoming widely available. Under the Administration's proposal, all consumers are guaranteed access to at least one fee-for-service plan that offers unlimited freedom to choose providers. In addition, most consumers are likely to have the option of one or more PPOs that allow them to get care out of the plan's network. The requirement that health plans include a POS option could actually serve as an impediment to the entry of new plans into the market.

In addition, a POS requirement would necessitate standardizing the rules by which POS options are structured. Doing so could force HMOs to organize services in a manner that could compromise their effectiveness at both containing costs and ensuring quality. Currently, most plans set up a POS option that offers consumers the choice to go out of the plan, but uses strong financial incentives to stay in the network. Agreeing on the appropriate level of financial incentives would likely prove difficult. Extensive use of the POS option may make it

more difficult for HMOs to manage quality. Although the POS option could supposedly not be used by enrollees to obtain denied services, it might make it easier for enrollees to bypass plans' utilization review protocols.

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CHAPTER 5

SETTING EXPENDITURE LIMITS FOR STATES

This chapter focuses on expenditure limits and their application to states and substate areas. Most of the discussion is in the context of federally enforceable expenditure limits, but the analysis may apply equally to proposals that would use expenditure targets as broad guides for cost containment or as triggers for future action, such as the use of standby premium limits.

Three major proposals before the Congress would involve calculating some type of expenditure limit. Representative Stark's all-payer bill (H.R. 200) uses expenditure limits extensively but assigns them only at the federal level. The McDermott-Wellstone proposal would establish a system of federal payments to the states. Finally, the Administration's proposal would apply premium limits at the level of regional health alliances.

The analysis in this chapter raises serious questions about the adequacy of existing databases to support the determination of accurate historical baselines for states and substate regions. Outside the Medicare program, no database is available on spending in substate regions. For state spending, the principal existing database yields numbers that are inconsistent with Medicare spending patterns—a result that could reflect differences between the Medicare and under-65 populations, but could also indicate the inadequacy of the data for the general population.

The Commission has developed several recommendations on how expenditure limits should be designed. They are based on the premise that the Congress may choose to enact a system of expenditure limits at the state or substate level. They do not, however, imply that the Commission has endorsed this approach to health system reform. Some of these recommendations were first introduced in a report, *Expenditure Limits: Design and Implementation Issues*, the Commission submitted to the Congress in July 1993 (PPRC 1993b). The recommendations and analysis in this chapter expand on that report in several respects, especially for systems where premium limits are used.

RECOMMENDATIONS

With a system of expenditure limits, historical spending baselines should provide the starting point for establishing limits, with adjustments for the impact of changes in benefits and coverage resulting from health system reform. Expenditure limits should encompass all services included in a standard benefit package. If premium limits are used to enforce them, plan premiums should be adjusted actuarially to reflect differences in cost sharing.

Limits at the state or substate level should be based on a blend of historical spending and national rates of spending, with an increasing weight given to national spending over time. Adjustments to an overall national target should be made for various factors that may drive state variations but cannot be controlled, even in the long term. Applying expenditure limits to state or substate areas should be preceded by substantial data development.

This chapter principally focuses on setting expenditure limits at the state or substate level, although these must be based on overall national targets. The chapter thus begins with a brief discussion of how expenditure limits should be set at the national level. It includes a short overview of the leading proposals that use expenditure limits. It also comments on how cost sharing should be treated when premium limits are used.

The next section of the chapter addresses the assignment of expenditure limits to states. It first considers how to measure state spending, discusses the inadequacies of existing data sources, and reports on empirical analyses of historical state spending levels. It then looks at the policy issue of how state targets should be set and describes three principal options for establishing targets: separate state historical baselines, a common national baseline, and a blend of the two.

Finally, the chapter reviews the possible use of substate targets. Switching from the state to the substate level for budget enforcement makes little difference conceptually. The switch may, however, add a degree of complexity because most current data sources are inadequate for substate analysis.

SETTING EXPENDITURE LIMITS OR TARGETS

In its report on expenditure limits, the Commission addressed both the use of historical baselines as an overall starting point for targets and the types of adjustments that would be applied to those baselines. It concluded that, if the Congress were to adopt expenditure limits, historical spending baselines should provide the starting point for meeting these goals. To the extent possible, they should be based on data averaged across several years. Historical spending baselines reflect the realities of a system where large segments of the population are not insured. As a result, adjustments would need to be made for the impact of changes in benefits and coverage under health system reform as well as for demographic and other factors that might be expected to change over time.

From this starting point, annual updates could follow various patterns, such as the rate of growth in gross domestic product (GDP), plus or minus a given amount (see Chapter 2). Implementation and enforcement of a system of expenditure limits depends on whether policymakers choose to use premium limits, rate setting, or some other method (see Chapters 3 and 4).

Reform Proposals before the Congress

The analysis in this chapter is most applicable to the three major competing proposals before the Congress that use enforceable expenditure limits. The conclusions reached here, however, would be equally applicable under variations on those proposals.

The use of expenditure limits in the Stark all-payer proposal is the simplest because it would apply limits only at the national level.[1] Separate budgets would be set for Medicare and non-Medicare spending, and each starts from current spending levels. The historical baseline would be updated each year by the average annual growth of GDP for the previous five years (plus an additional amount during a transition period). The budgets would be further broken down into 10 specified service categories, such as physicians' services. Those allocations would be adjusted for different trends in spending across categories, for spending in states permitted to opt out of the national system, and for spending by health maintenance organizations (HMOs).

The McDermott-Wellstone bill would impose a budget on spending, but it would operate differently by being part of a single-payer system instead of a system that limits private health spending. A national budget for covered health services would be based generally on historical trends, with increases tied to GDP growth. Federal payments would be made to the states, which in turn would make payments to providers or health plans. Federal payments would be allocated on the basis of state-specific per capita costs, calculated as the product of a national average per capita cost, a state adjustment factor (e.g., labor costs, geographic distribution), and a risk-adjustment factor.

The basic structure of expenditure limits in the Administration's proposal is a system of premium limits that would be imposed and enforced by the federal government. The premium limits themselves would be applied at the level of the regional alliance, not the state (although some states might have only a single alliance). Alliances in turn would apply the premium limits—without discretion—to individual plans under rules specified by a national board. The Administration's proposal would set national expenditure limits based on historical spending, adjusted to incorporate increased spending by those previously uninsured. Starting from the national targets, the proposal would assign targets to regional alliances based on an adjustment factor that considers differences in historical spending by state. Alliance spending growth targets would be updated by a health care inflation factor that declines to growth in the consumer price index (CPI) over the first five years and then reverts to a default of per capita real GDP growth plus CPI after 2001.

Treatment of Cost Sharing in Expenditure Limits

The Commission stated in its earlier report that, if expenditure limits are adopted, they should encompass all services that are included in a standard benefit package. In a system

[1] That bill was a primary focus of the Commission's earlier report on expenditure limits (PPRC 1993b). Some of these issues are also discussed in Chapter 4 of this report.

that uses the premium as the principal enforcement mechanism, this rule is complicated by the treatment of cost sharing. Because cost sharing (i.e., all copayments, coinsurance, and deductibles) is outside the premium, it is effectively excluded from the budget. The actuarial value of cost sharing is substantial. The Congressional Research Service estimated that eliminating standard cost-sharing provisions would raise the premium of a typical health plan offered by a medium or large employer by about 15 percent (CRS 1988).

If the standard benefit package came with a single cost-sharing option, then this distinction would be unimportant. But since proposals like the Administration's allow plans to offer multiple choices for cost sharing, there would be budgeting implications. For example, if a substantial number of consumers during a particular open season switch from high cost-sharing plans (e.g., fee-for-service plans) to low cost-sharing plans (e.g., staff-model HMOs), then there would be a net shift of expenditures from off-budget to on-budget status. Thus, even if the prices and volume of care grew at the allowable rate, total expenditures included in the budget would grow more rapidly, and a regional alliance could find itself out of compliance. The result of this anomaly could be an artificial tightening of budget targets. This would occur if a preponderance of plan switching by consumers was from fee-for-service plans to more managed plans, as the proponents of managed competition advocate.

This anomaly could be readily eliminated. One option is to require all plans to use a standardized form of cost sharing. Because reduced cost sharing for managed-care plans is well established as an incentive to select these plans, however, it may be unrealistic to eliminate the choice of cost-sharing options for consumers. Alternatively, premiums could be adjusted by adding the actuarial value of cost sharing to the premiums for purposes of budgetary calculations. The latter modification would ensure that plans would not face premium reductions simply because enrollees in a regional alliance switched to plans with less cost sharing.

EXPENDITURE LIMITS FOR STATES

Several proposals would give the states a central role in running a reformed health system. In some, such as McDermott-Wellstone, enforcement might occur at two levels—with the federal government holding states accountable for total spending within the state and the states determining how expenditure limits would be applied to health plans or individual providers. Alternatively, in proposals like the Administration's, the mechanism for accountability—premium limits—would be imposed by the federal government and applied at the level of the regional alliance, not the state. The following discussion is posed in terms of states, since data on states are more readily available. Nonetheless, the conceptual issues apply to other regions as well. The final section of this chapter discusses more specifically the issues involved in moving to substate regions.

Measuring State Health Spending

Before describing the options for setting state targets, this section looks closely at the databases available for this task. State spending data are important for at least two reasons: (1) to set separate state historical baselines and (2) to assess current spending on an ongoing basis, or at least to project future spending in the absence of actual premium data.

State spending should be defined as the amount spent on all health services to state residents, whether furnished in the state or elsewhere, rather than as the amount spent on all services delivered by providers located in the state. In a system that uses premium limits, this definition becomes the only possible choice. The insurance premium is in effect the health plan's estimate of anticipated per capita spending on all services for an enrollee. Thus, the average premium should correspond to the per capita amount spent on all services to state residents.

There are two principal sources of state data for the general population: premium data and total state health expenditures calculated from the national health accounts of the Health Care Financing Administration (HCFA). There are advantages and disadvantages to the use of each.

Premium Data. In theory, historical premiums should be the best starting point, since they should be directly comparable to the plan premiums on which budget enforcement would be based. In reality, this option raises a number of problems. In today's insurance market, plans vary enormously in terms of the types of benefit packages they cover. In addition, premiums in the small-group and individual market are presumably higher because of risk selection and administrative inefficiencies. Premiums in the large-group market are often difficult to calculate because a majority of such groups are self-insured. Finally, plans do not know how much cost sharing is paid by their enrollees out of pocket and thus cannot report total spending for covered services.

One possibility is to use actuarial models to calculate expected premiums by state. Such modeling is being used to calculate total expected costs under health system reform. Differences among models are the source of much of the controversy over the costs of reform (Rivlin et al. 1994; Sheils and Lewin 1994). There might, however, be less disagreement among the experts over how to estimate relative premium levels for states or substate regions.

Although accurate premium data are not available, the Department of Health and Human Services (HHS) is beginning to collect this information.[2] In addition, the Robert Wood Johnson Foundation has sponsored collection of insurance data in 10 states. The availability of comprehensive premium data could represent a major step forward if the data prove to be

[2] According to HHS, this survey would gather information on benefits and premiums in roughly 51,000 establishments.

usable. Data should be collected not only on premium levels for a wide variety of group and individual policies, but also on benefit packages, cost sharing, and other factors that might change under reform. This task may be difficult, given the many dimensions (e.g., benefits, cost sharing, and fee schedules) on which insurance policies differ in today's market. Adjusting for these differences could introduce a substantial chance of error.

State Expenditure Data. As discussed in the Commission's expenditure-limit report, current information is not widely available on state per capita spending (PPRC 1993b). Newly published data from the Health Care Financing Administration provide more recent estimates (Levit et al. 1993). Taken from the first phase of a study of per capita state spending in 1991, these data represent only spending on hospital services, physicians' services, and prescription drugs. Omitted is spending on other services that would be in a standard benefit package, such as home health care, durable medical equipment, and rehabilitation services. HCFA says that these data represent about 70 percent of spending for personal health care services.[3] Future analyses will estimate state shares of other service categories (e.g., durable medical equipment, home health care, and nursing home care) and state breakdowns by sources of payment (e.g., Medicare, Medicaid, private insurance, and out of pocket). These results are expected sometime in 1994.

Significant concerns can be raised about the accuracy of these data. First, the data are derived from a variety of different sources, not all of which may be comparable. For example, hospital spending is taken from American Hospital Association reports, while physician spending is estimated from a combination of Census Bureau and Internal Revenue Service data. Each source contains potential inaccuracies, especially because data were collected for other purposes. Definitions change over time as well. For example, HCFA has incorporated the Standard Industrial Classification revisions that were introduced in 1987. This revision, among other things, combined physicians' clinics with offices, allowing a more accurate measurement of the entire range of services provided by physicians. This change, which probably affects states unevenly, resulted in a $9 billion increase in spending for physicians' services in 1991. Although such a revision is more important to a system that allocates spending by provider category, it points out the measurement problems that exist in such a data exercise.[4] Finally, the data are provider-based, not person-based. Thus, any time a state's residents cross state lines to receive services, those services are counted toward the state where the provider is located.[5]

3 Some of the remaining spending is for services such as long-term care that would be outside a standard benefit package; thus, the HCFA data represent a higher percentage of covered services.

[4] For other methodological issues, see Appendix A of the Commission's *Annual Report to Congress 1993* (PPRC 1993a) and the background memorandum accompanying HCFA's release of state health expenditures data (HCFA 1993).

[5] Spending in some states may be overestimated if teaching hospitals bring in research through the hospital, not the medical school. Such research spending would thus be counted in total state spending.

To serve as baselines under reform, these data would require two different types of adjustments. First, corrections need to be applied so that the data accurately represent today's spending by a state's residents. Second, adjustments are needed to project what state spending would be in a reformed health system.

Correcting Data to Measure Today's Spending. A principal source of inaccuracy in the state expenditure data is border crossing. The HCFA data count services toward the state where the provider is located, not the one where the beneficiary resides. An adjustment is needed for the amount of border crossing, or the estimated net interstate flow of health spending. Studies of border crossing for Medicare beneficiaries can be used to show the effect of these interstate flows (Levit 1985; Miller and Welch 1992; Holahan and Zuckerman 1991). Although an estimate based on Medicare expenditures might be used as a proxy, the patterns of interstate flows would likely be different for the population as a whole. A working-age person, for example, may receive out-of-state care when his or her work place and home are in different states, whereas a retiree may receive out-of-state care when spending winters in warmer climates. As a result, border crossing patterns may vary for these different populations. HCFA is developing new estimates of interstate flows of expenditures (Levit et al. 1993).

A second potential source of inaccuracy is the instability of estimates of state spending over time. Unfortunately, the ability to analyze trends with the HCFA data is limited by the fact that many of the sources used to derive estimates are not collected annually. Thus, distributions for intervening years are interpolated or extrapolated. Analyses of Medicare data show considerable instability from year to year (PPRC 1993a; PPRC 1993b). Instability may result in part from methodological issues (e.g., changes in carrier policies) and in part from changes in the delivery of services or patient morbidities from year to year. In either case, instability makes it harder to measure spending accurately.

Adjusting Data to Project Spending under Reform. Health system reform, however enacted, would inevitably lead to changes in health spending. At least three adjustments are needed to transform today's spending into projections or baselines for the future.

First, estimates would have to be increased to cover the greater utilization that would result from providing the standard benefit package to all Americans. Those now uninsured or underinsured receive some services (e.g., emergency room care, uncompensated care from hospitals or physicians, or care paid out of pocket). Most studies, however, show that the level of services is substantially below that for fully insured populations. The size of this adjustment is being widely studied (Rivlin et al. 1994; Sheils and Lewin 1994). Because the numbers of the uninsured and underinsured vary by state, these adjustments will certainly vary by state.

A second adjustment would account for any population groups that would not be included under the system of expenditure limits. In the Administration's bill, for example, regional

alliance targets should be adjusted to exclude Medicare enrollees, beneficiaries of certain other federal programs (e.g., CHAMPUS and the Indian Health Service), and workers whose employers choose to form corporate alliances. Under other variants on reform, it might be necessary to exclude Medicaid beneficiaries or public employees. HCFA's state expenditure data will probably allow these adjustments to be made once additional work is complete. Decisions made by businesses to form corporate alliances under the Administration's proposal and the option for certain Medicare enrollees to join regional alliances would complicate this process.

Third, if cost sharing is considered off-budget, targets would have to be decreased to allow for whatever portion of spending consumers would cover in the form of cost sharing. If cost sharing were incorporated in the expenditure limits, as described earlier, this adjustment would not be necessary.

Analyzing the Effects of Data Adjustments. The Commission has analyzed the effects of these factors by developing several indexes for adjusting the data on state health spending (Table 5-1). All indexes are expressed as relative ratios, where the average state has a value of 1.00. States with higher-than-average levels of the particular characteristic have index values of greater than 1.00. The methods used to calculate these indexes are as follows:

- The border crossing index uses published calculations, for each state's Medicare population, of both the proportion of services its providers furnish to out-of-state patients and the proportion of services that its residents receive elsewhere (Levit 1985; Miller and Welch 1992; Holahan and Zuckerman 1991).[6] The ratio of the latter to the former is an index that converts the HCFA data to a more accurate total of spending by the state's residents. Most states are adjusted upward or downward by less than 10 percent, but four states (Alaska, Idaho, Vermont, and Wyoming) are adjusted upward by more than 10 percent, and the District of Columbia is adjusted downward by 20 percent.

- The uninsured index uses the relative ratio of a state's insured population to the national rate, based on 1987 data from the National Medical Expenditure Survey. It also incorporates the assumptions made by the Congressional Budget Office that the uninsured would increase their use of hospital services by 28.5 percent and their use of physicians' services by 97.2 percent (also based on the National Medical Expenditure Survey) (CBO 1993). These estimates assume coverage under a typical employment-based health plan. Although spending rates would rise as the uninsured use more services, the results are reported as deviations from the adjusted national average. Most

[6] Data are not available to construct an index on border crossing for the under-65 population.

Table 5-1. Indexes for Use with State Spending Baselines (ratios)

State	Border Crossing Index	Uninsured Index	Input Price Index	Demographic Index
Alabama	1.02	0.97	0.88	1.00
Alaska	1.12	0.95	1.17	0.95
Arizona	0.97	0.97	0.99	0.99
Arkansas	1.05	0.96	0.84	1.01
California	0.99	0.94	1.13	0.98
Colorado	0.97	1.00	0.96	0.99
Connecticut	1.01	1.06	1.10	1.03
Delaware	0.91	0.98	0.99	1.01
District of Columbia	0.81	0.91	1.09	1.02
Florida	0.98	0.96	0.97	1.03
Georgia	0.99	0.98	0.90	0.99
Hawaii	0.98	1.07	1.06	0.99
Idaho	1.16	0.98	0.90	0.97
Illinois	1.04	1.04	0.98	1.00
Indiana	1.01	1.02	0.92	1.00
Iowa	1.07	1.07	0.88	1.00
Kansas	1.06	1.05	0.88	0.99
Kentucky	1.03	1.00	0.89	1.00
Louisiana	0.99	0.95	0.91	0.98
Maine	1.05	1.05	0.93	1.01
Maryland	1.04	1.05	1.01	1.01
Massachusetts	0.97	1.06	1.05	1.01
Michigan	1.03	1.06	1.01	1.00
Minnesota	0.90	1.06	0.95	0.99
Mississippi	1.09	0.96	0.82	0.98
Missouri	0.95	1.02	0.92	1.01
Montana	1.06	0.99	0.89	1.00
Nebraska	0.99	1.04	0.88	0.99
Nevada	0.94	0.98	1.04	1.02
New Hampshire	1.07	1.01	0.97	1.00
New Jersey	1.06	1.04	1.06	1.03
New Mexico	1.09	0.91	0.93	0.98
New York	1.00	1.02	1.10	1.02
North Carolina	0.96	0.99	0.90	1.01
North Dakota	0.90	1.06	0.87	0.98
Ohio	1.00	1.06	0.95	1.01
Oklahoma	1.05	0.92	0.86	1.00
Oregon	1.00	1.00	0.99	1.01
Pennsylvania	0.99	1.05	1.00	1.02
Rhode Island	1.01	1.05	1.02	1.01
South Carolina	1.09	0.99	0.90	0.99
South Dakota	1.01	1.03	0.84	0.98
Tennessee	0.90	1.01	0.90	1.01
Texas	0.97	0.90	0.92	0.97
Utah	0.95	1.05	0.96	0.91
Vermont	1.11	1.06	0.92	1.00
Virginia	1.04	1.03	0.93	1.00
Washington	1.00	1.02	1.00	0.99
West Virginia	1.03	1.00	0.88	1.02
Wisconsin	1.02	1.06	0.92	0.99
Wyoming	1.34	1.01	0.89	0.98

SOURCE: Physician Payment Review Commission analysis.

NOTE: All indexes are expressed as ratios, where values greater than 1.00 signify that the state has a higher level of border crossing, insured rate, input prices, or older residents than the national average. The methods for calculating these indexes are explained in the text.

states are adjusted by less than 5 percent, but three (New Mexico, Texas, and the District of Columbia) have indexes that raise their averages by nearly 10 percent.

- The adjustment to exclude Medicare beneficiaries from state spending averages was made by subtracting total Medicare spending by state from HCFA's state data and subtracting total Medicare beneficiaries from state populations. The Medicare totals were derived from compilations by HCFA's Bureau of Data Management and Strategy. This adjustment is not shown as an index in Table 5-1.

These indexes were applied to HCFA's state health expenditures data to produce new estimates of state spending (Figure 5-1 and Table 5-2). For each state, spending is expressed as a ratio of its per capita spending to the national average; a value of 1.07 means that a state's per capita spending is 7 percent above the national average. The resulting rates are substantially different from the unadjusted HCFA numbers, especially for a few states.[7] For example, estimates for Alaska, New Mexico, and Wyoming were increased by at least 15 percent measured in relative terms. Other states (e.g., Florida, Massachusetts, and Tennessee) went down at least 5 percent in relative terms. These differences emphasize why the unadjusted HCFA totals should not be used as an indication of how states would line up. Because this analysis does not make adjustments for populations that would be excluded from the expenditure limits (e.g., workers for large businesses in the Administration's proposal), these totals should be used with caution in interpreting how states might fare under different proposals.

The reasonableness of these results can be assessed by comparing adjusted state spending averages to per capita spending in the Medicare program. Medicare data have several advantages. They are based on the beneficiary's place of residence, not where the service is delivered, eliminating the need for a border crossing adjustment. Second, they represent a universally covered population, making an uninsured adjustment unnecessary. In addition, the benefit package is the same throughout the country, and Medicare's data system as a rule captures all services uniformly from claims.

These data also have limitations for use as a proxy for systemwide spending. The Medicare population does not represent the general population in terms of either service utilization and the prices of services. The fact that utilization is higher on average is controlled by considering the data only as deviations from the national mean, rather than as absolute numbers. For this analysis, the Medicare data were adjusted to correct for price differences

[7] The District of Columbia, with by far the largest unadjusted spending per capita, is adjusted downward by about 13 percent, but its average is still more than twice that of the highest state. This suggests that the border crossing adjuster is probably not capturing all of the interstate flows. The interpretation of District spending is discussed later in the chapter.

between Medicare payments and those of private payers. Medicare prices match private ones more closely in some states than in others; for example, Maryland's all-payer system has kept Medicare and private hospital rates nearly identical. It is important to remove this source of variation if Medicare data are used as a proxy for spending in the general non-Medicare population. On the hospital side, this adjustment used published data on ratios of Medicare hospital prices to costs (ProPAC 1993).[8] On the physician side, the adjustment was based on an analysis of Part B submitted-to-allowed charges.

Spending averages calculated from state health expenditures and Medicare data look considerably different (Figure 5-2 and Table 5-2). The simple correlation between the two series was a relatively low 0.46 (excluding the District of Columbia). Spending for a few states (California, Florida, Louisiana, and Mississippi) is substantially higher when measured using Medicare rather than the state expenditure data. About one-fourth of all states have a pattern of substantially lower spending if Medicare data are used. They include states such as Hawaii, Minnesota, and Oregon, often characterized as states where spending has been kept low, as well as several rural states (Alaska, Nebraska, North Dakota, South Dakota, and Wyoming).

The fact that the pattern of low-cost and high-cost states in the two data sources looks quite different may have several explanations. One is that the comparison is not valid because of the differences between Medicare beneficiaries and the under-65 population and their use of health services by state. Alternatively, it may indicate that the border crossing adjustment as currently structured is inadequate for correcting the provider-based estimates of state expenditures. Another explanation is that one or the other set of numbers is substantially inaccurate. Finally, all three may help account for these differences.

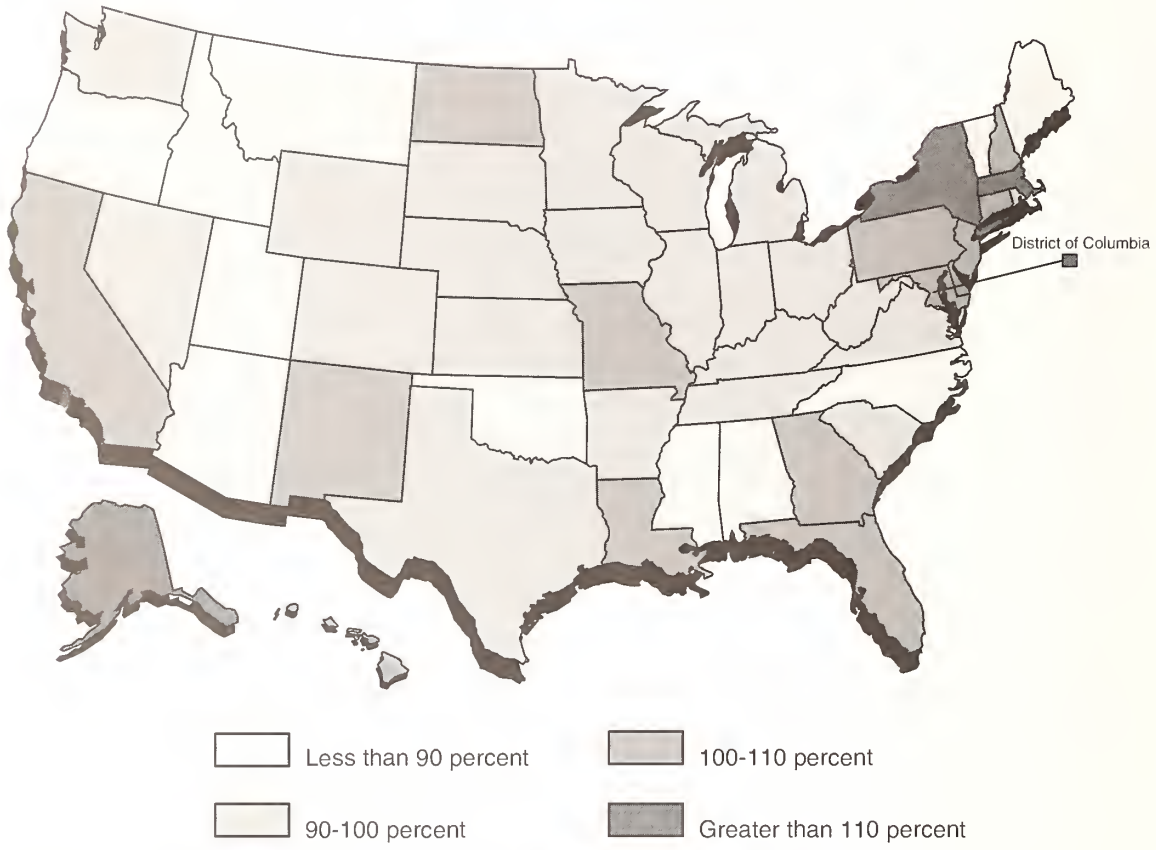
Regardless of the explanation, this analysis raises doubt about whether available databases can be used to construct historical spending baselines by state. Both data series appear to contain significant inaccuracies for use as a historical baseline. If these baselines are needed, it will be necessary to collect additional data. The Administration, for example, proposes using a mix of state expenditure data, Medicare data, and newly collected premium data. All these sources should be used, but the errors would probably still be substantial. The results may introduce significant inequities into the resulting baselines.

The Basis for State Targets

Assuming that states play some role in the budget process (and ignoring data problems for the moment), the critical policy issue is how state targets should be set. There are three basic options for setting these targets:

[8] National averages were substituted for missing hospital adjustments for Alaska, Delaware, and Hawaii.

Figure 5-1. Adjusted State Spending, 1991 (percentage of national average)



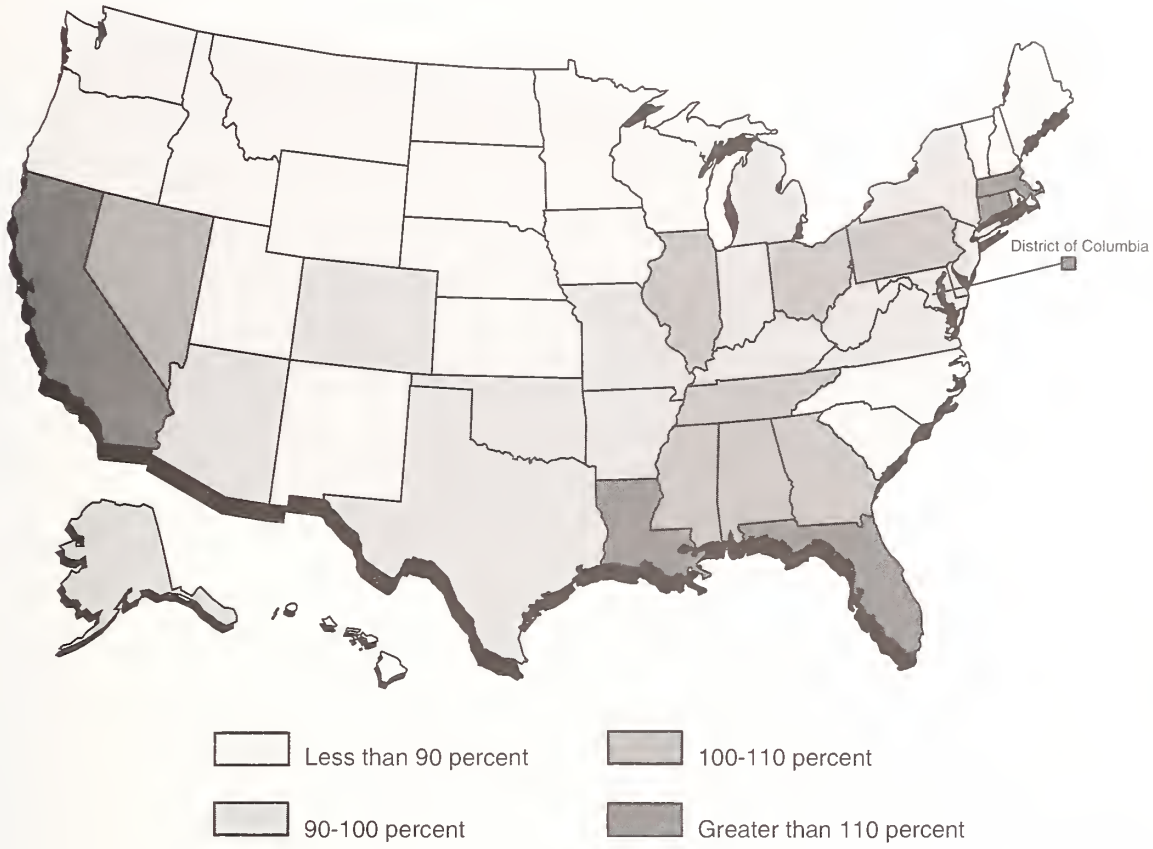
SOURCE: Physician Payment Review Commission analysis of HCFA state expenditure data (Levit et al. 1993).

NOTE: State expenditures are adjusted for border crossing and uninsured indexes.

- basing each state target on its own historical baseline;
- basing each state target on a common national expenditure limit; and
- constructing a blend of historical and national rates of spending, with an increasing weight for national spending over time.

Empirically, the variations among states are substantial. Depending on the data source used, some states spend twice as much per person as others (Table 5-2). The adjusted state expenditure data (excluding the District of Columbia) have a somewhat narrower range of variation than the Medicare data. Adjustments for such factors as input prices,

Figure 5-2. Adjusted Medicare Spending, by State, 1991
(percentage of national average)



SOURCE: Physician Payment Review Commission analysis of data compiled by HCFA's Bureau of Data Management and Stategy.

NOTE: Medicare expenditures are based on compilations for over-65 beneficiaries, adjusted for differences between Medicare's prices and those of other payers.

demography, and epidemiological factors do not appear to explain the state variations (PPRC 1993b).

The advantages and disadvantages of these different approaches are described in the following sections. The Commission prefers the third strategy of a blend of state-specific historical baselines and a common national baseline (the latter adjusted for certain factors). This choice is similar to a previous recommendation on how to set state targets for the Medicare Volume Performance Standard (PPRC 1993a). The Administration's proposal considers this overall strategy by using historical baselines for the early years under reform and suggesting a shift toward a common national limit in the future. It defers any decision on

Table 5-2. Spending for under-65 and Medicare Populations, by State, 1991 (ratios)

State	Adjusted State Spending[a] (U.S.=1.00)	Adjusted Medicare Spending[b] (U.S.=1.00)
Alabama	1.00	1.00
Alaska	1.23	0.96
Arizona	0.87	0.96
Arkansas	0.90	0.99
California	1.03	1.23
Colorado	0.99	0.91
Connecticut	1.06	1.15
Delaware	1.07	0.95
District of Columbia	2.89	1.31
Florida	1.03	1.17
Georgia	1.05	1.04
Hawaii	1.04	0.79
Idaho	0.77	0.69
Illinois	0.99	1.00
Indiana	0.94	0.92
Iowa	0.93	0.73
Kansas	0.95	0.85
Kentucky	0.93	0.94
Louisiana	1.04	1.22
Maine	0.86	0.84
Maryland	1.03	0.99
Massachusetts	1.20	1.12
Michigan	0.97	0.99
Minnesota	0.98	0.71
Mississippi	0.78	1.00
Missouri	1.02	0.92
Montana	0.79	0.76
Nebraska	0.96	0.73
Nevada	0.98	1.00
New Hampshire	1.01	0.87
New Jersey	1.02	0.91
New Mexico	1.02	0.72
New York	1.11	0.99
North Carolina	0.86	0.87
North Dakota	1.02	0.81
Ohio	0.94	1.01
Oklahoma	0.86	0.95
Oregon	0.86	0.72
Pennsylvania	1.05	1.07
Rhode Island	0.97	0.94
South Carolina	0.95	0.84
South Dakota	0.97	0.71
Tennessee	0.98	1.04
Texas	0.98	0.99
Utah	0.75	0.74
Vermont	0.83	0.78
Virginia	0.97	0.94
Washington	0.91	0.81
West Virginia	0.96	0.95
Wisconsin	0.96	0.73
Wyoming	0.94	0.62

SOURCE: Physician Payment Review Commission analysis.

[a]State spending is based on HCFA state expenditure data, adjusted for border crossing and uninsured indexes, and to exclude Medicare beneficiaries (Levit et al. 1993).

[b]Medicare spending (Parts A and B) is based on HCFA compilations for over-65 beneficiaries, adjusted for differences between Medicare's prices and those of other payers. National averages were substituted for missing hospital adjustments for Alaska, Delaware, and Hawaii.

moving to a common national expenditure limit, however, until a special commission could make recommendations on reducing state variations. The Commission's approach would write into law a transition formula for moving toward a single national target. The McDermott-Wellstone bill takes an approach similar to the Commission's. It starts with the national average per capita cost and modifies this for each state on the basis of such factors as average labor and nonlabor costs. These adjusted capitation amounts are phased in from historical state averages over a five-year period.

Use of a Historical Baseline Target for States. This strategy entails basing each state's target on historical spending levels, with adjustments for factors that might result from health system reform (principally, increased services to those previously uninsured). In effect, a state meets its target simply by spending at its historical rate.[9] The use of historical baselines to set targets for state spending is attractive because it does not impose unrealistic requirements on states to meet a common target in year one (or even after a brief transition). In addition, the use of historical baselines obviates the need to adjust for the factors that drive state variations. Since these factors do not change significantly from year to year, a state's historical baseline already incorporates these differences.

The use of historical baselines, however, has several distinct disadvantages. At a substantive level, it has the effect of locking into place various differences among states. Consider two types of low-spending states: (1) one that has already achieved greater efficiencies in its health system due to state-level reforms or to private-sector developments and (2) one that has a poor record of providing access to services for its insured population. In the first case, a low expenditure limit might penalize the state for its success in reducing the amount of unnecessary and inappropriate services provided to its citizens. Health plans within the state would have little or no margin to adopt new technologies or otherwise to expand capacity compared with those in a state where volume was historically higher. In the second case, a low target would constrain the state's ability to expand access to its underserved population by locking in the historically low level of services—whether that resulted from income differences or other factors. Poor access for uninsured or underinsured populations would be taken into account in revising historical baselines to set the initial targets, but there is no basis for making adjustments for poor access to well-insured populations.[10]

[9] Annual updates are assumed to be uniform across all states under this option. Although an alternative would be to set updates differently based on historical rates of growth by state, the data are clearly not available to support this approach.

[10] The Commission's work on access for vulnerable Medicare enrollees shows the dimensions of access gaps for a well-insured population (see Chapter 17).

Other issues have more to do with the available databases to support the use of historical baselines. As described earlier, existing databases are generally inadequate for setting accurate baselines.

Use of a Single National Target for States. This strategy entails limiting spending in each state to an overall national target with adjustments for various uncontrollable differences. The advantage of this strategy is that it places all states on the same terms. Just as the Commission rejected the notion of geographical differentials in physician payment rates other than those that could be reflected in the geographic practice cost index (GPCI), this strategy rejects any notion that state premiums should differ based solely on geography after increased insurance coverage is achieved.[11]

Although this strategy might make sense in the long term, its main drawback lies in the substantial differences that now exist. Analyses by the Commission and others suggest that variations in state spending cannot be explained solely by factors such as demographic differences or input prices. Most experts believe that much of this variation results from differences in income, system capacity, access and utilization levels for underserved populations, and the amount of inappropriate or unnecessary care delivered. Although states or localities theoretically have the capacity to alter these factors, such changes would take many years to accomplish.

A 1992 General Accounting Office study found that seven variables were significant predictors of state spending: income, number of physicians, number of hospital beds, number of nursing home beds, a measure of health status, percentage of hospital beds in metropolitan areas, and a regulatory variable (either use of an all-payer rate regulation system or use of mandatory rate regulation) (GAO 1992). Even though this list includes some factors (e.g., health status) that might be used as adjusters to the common baseline, the analysis suggests that system capacity (e.g., number of physicians or hospital beds) is an important source of variation. One key variable not in that analysis was the proportion of services considered inappropriate or unnecessary. At least two empirical studies have found that inappropriate use of services occurs to a similar extent in regions with low and high utilization rates (Chassin et al. 1987; Leape et al. 1990).

The use of a national target does not mean that every state would have an identical target.[12] Instead state targets should be adjusted to account for various factors that may drive state

[11] Some have argued that, because financing is based on premiums rather than taxes, the citizens of a state should not be restricted from choosing to spend more of their own money on health care. This is more an argument against imposition of expenditure limits on the private side (see Chapter 2).

[12] This conclusion parallels the elimination of geographic differentials in Medicare physician payment reform. Input prices as measured by the GPCI mean that physician fees are adjusted for regional variations in factors such as office rents and wages.

variations but cannot be controlled, even in the long term. If state-level expenditure limits are used, adjustments to the national target might include differences between a given state and the national average for a range of variables. Among these are input prices, such as labor and nonlabor costs; demography, such as age and sex distribution; and health status and epidemiological factors. Other possibilities are the geographic distribution of a state's population, particularly the proportion of the population residing in rural, inner-city, or other medically underserved areas, and other social, environmental, or geographic conditions affecting the need for health care services.[13]

Blending State-Specific Historical Baselines and a Single National Target. The principal problem with using a single national target is the disruption that would be created by forcing states to meet an unrealistic target without any transition. To the extent that state variations result from factors such as system capacity, it seems unlikely that states could be expected to meet a common target within a short time. It seems more probable that variations could be reduced only after several years.

Designing a mechanism for reducing state variations depends in part on understanding the sources of those variations. Some sources can be built into a single target as adjusters (e.g., demographics or input prices). But it is important to identify other sources of variation to determine whether and how they should best be reduced.

The Commission has previously described an approach to adjusting targets over time to narrow variation across states.[14] Specifically, targets based on a rate of growth could be determined as a function of the difference between state-adjusted expenditure levels per capita and national expenditures per capita. States with adjusted expenditures above the national average would receive target rates of growth below the national target, so that they would converge toward the national average over time. Conversely, states below the national average would receive target rates of growth above the national target. Implementation of this approach would require calibration on two dimensions: (1) specification of the formula for determining how much a state's target should exceed or be less than the national target and (2) determination of the actual value of the proportional adjustment factor. Together these specifications would determine how quickly states would be required to meet a single national target.[15]

Changing budget targets is the type of difficult distributional issue where some states or substate regions are likely to be losers. In a situation like this, the Congress might prefer

[13] Although these adjusters make sense from the perspective of state expenditure limits, it is less clear whether consumers should be asked to pay different premiums based on these factors (see Chapter 7).

[14] For a more detailed description of this approach, see Chapter 13 of the Commission's *Annual Report to Congress 1993* and Chapter 5 of its report on expenditure limits (PPRC 1993a; 1993b).

[15] Some might choose not to phase out the state-specific component completely.

to insulate itself from such decisions, leaving them to an independent entity or creating decision rules that limit the impact of distributional politics. The Administration's bill proposes one such solution by creating a special commission to decide how and when state variations would be reduced and by including special procedures whereby the Congress would approve or disapprove any change on a single up-or-down vote without amendments. It would be preferable to enact as part of the original reform legislation a transition formula for moving from separate state historical baselines to a single national target.

Analyzing Adjusted National Targets and Their Effects. The Commission has considered some of the technical issues that would be involved in creating an accurate state target. The analysis in this section demonstrates the effect of making adjustments to a national baseline. In doing so, it looks beyond the transition period and considers the effect of a fully adjusted national target. The two factors for which data are available are an input price index and a demographic index (Table 5-1). The methods used to calculate these indexes are as follows:

- The input price index is based on Medicare's input price adjusters for each state. Hospital spending was adjusted by Medicare's hospital wage index, applied only to the wage portion of hospital spending. Physician spending was adjusted by Medicare's GPCI, reduced here as it is for the work component of the Medicare Fee Schedule. Most states are adjusted by 10 percent or less, but Arkansas, Mississippi, and South Carolina are more than 15 percent below average in input prices, and Alaska is 17 percent above average.

- The demographic index is based on the age-sex mix of each state, compared with the national average. Weights were assigned based on an analysis of the National Medical Expenditure Survey by the Congressional Research Service. With two exceptions (Alaska and Utah, both with younger populations), these adjustments are 3 percent or less.

Not included in this analysis are the effects of other potential adjusters such as health status and epidemiological factors. These adjustments could be substantial, although accurate data are not broadly available and proper weights would be difficult to calibrate. For example, there are tenfold differences across the states in the incidence of AIDS and twofold or larger differences in rates of death due to cancer (Loprest and Gates 1993).

Each state's spending target is calculated from an overall national target, defined as national average spending, adjusted by the input price and demographic indexes (Table 5-3). It is noteworthy that a "single" national target could in fact vary considerably, mostly because of input price differences. For 17 of 50 states, these adjusters would move state targets more than 10 percent above or below the overall national spending target—although none are more

than 20 percent away from the national target.[16] Alaska, California, Connecticut, and New York have the targets with the largest upward adjustments. Rural states such as Arkansas, Mississippi, North Dakota, and South Dakota would receive the lowest targets according to this analysis.

Table 5-3. Distribution of States by National Spending Targets with State-Specific Adjustments

Percentage of National Average	Number of States
80% to 90%	12
90% to 100%	22
100% to 110%	11
110% to 120%	5

SOURCE: Physician Payment Review Commission analysis.

NOTE: Targets are based on 1991 national average per capita spending, adjusted for demographic and input price indexes. The District of Columbia is excluded from this summary table.

Of particular interest to policymakers is how states would perform compared with their targets if current spending patterns were to continue in the future. This question is considered by comparing state spending, using both adjusted Medicare data and adjusted state expenditure data, with the adjusted national targets. Adjusted national targets were expressed as deviations from the national average, and ratios of current spending to the target were calculated to show whether states are projected to be in compliance, that is, whether current spending patterns fall above or below their targets (Tables 5-4 and 5-5).

It is important to note, however, that these estimates do not reflect all the adjustments that should be made either to the targets or to current spending, nor do they reflect any trends toward higher or lower spending. As a result, these results should be viewed only as giving a general idea of how states would fare. Their importance is not the precise designation of winners or losers under a system of expenditure limits. Instead, the analysis demonstrates that an immediate shift to a national target may create economic disruptions. More important, the analysis highlights again the substantial discrepancies in results generated by different data sources.

[16] The District of Columbia is excluded from Tables 5-3 and 5-4 because it is an outlier to the distribution.

Table 5-4. Distribution of States by Spending Relative to Adjusted National Targets, by Data Source

Ratio of Spending to Adjusted National Target[a]	State Expenditure Data[b]	Medicare Data[c]
0.60 to 0.75	0	4
0.75 to 0.85	2	10
0.85 to 0.95	13	12
0.95 to 1.05	17	14
1.05 to 1.15	14	6
1.15 to 1.25	4	3
1.25 to 1.40	0	1

SOURCE: Physician Payment Review Commission analysis.

[a] Targets are based on 1991 national per capita spending, adjusted for demographic and input price indexes.

[b] State spending is based on HCFA state expenditures data for 1991, adjusted for border crossing and uninsured indexes, and to exclude Medicare beneficiaries (Levit et al. 1993).

[c] Medicare spending is based on HCFA compilations for over-65 beneficiaries for 1991, adjusted for differences between Medicare's prices and those of other payers.

NOTE: The District of Columbia is excluded from this summary table.

Using the adjusted state expenditure data, no state is projected to be more than 25 percent above or below its target based on current spending, while one-third are within 5 percent of their targets. About one state in three, however, would exceed its target by at least 5 percent. Generally, these are rural states whose targets are below average, although Massachusetts—11 percent above its target—is included in this group.

Using the Medicare data as a proxy for current state spending, there is a greater spread: 18 states are at least 15 percent above or below their targets, compared with six when spending was calculated using state expenditure data. Some states, including those often characterized as taking actions to lower costs, are below their targets. Four states (Hawaii, Minnesota, Oregon, and Wyoming) are projected to be between 25 percent and 30 percent below their targets. Other states would, on the basis of these projections, be required to reduce costs substantially under a system of expenditure limits. Louisiana is projected to exceed its target by about 35 percent, and several southern states (Alabama, Arkansas, Florida, Georgia, Mississippi, and Tennessee) as well as the District of Columbia are projected to be at least 10 percent above their targets.

Table 5-5. Spending Relative to Adjusted National Targets, by State (ratios)

State	Adjusted National Target[a] (U.S.=1.00)	Ratio of State Spending to Target[b]	Ratio of Medicare Spending to Target[c]
Alabama	0.89	1.12	1.13
Alaska	1.12	1.10	0.86
Arizona	0.99	0.88	0.97
Arkansas	0.86	1.05	1.15
California	1.13	0.92	1.09
Colorado	0.97	1.02	0.94
Connecticut	1.14	0.94	1.01
Delaware	1.01	1.06	0.94
District of Columbia	1.13	2.56	1.16
Florida	1.01	1.02	1.15
Georgia	0.91	1.15	1.15
Hawaii	1.06	0.98	0.74
Idaho	0.88	0.87	0.78
Illinois	1.00	0.99	1.01
Indiana	0.93	1.00	0.99
Iowa	0.90	1.03	0.81
Kansas	0.88	1.08	0.97
Kentucky	0.90	1.03	1.05
Louisiana	0.90	1.15	1.35
Maine	0.95	0.91	0.88
Maryland	1.04	0.99	0.96
Massachusetts	1.08	1.11	1.04
Michigan	1.02	0.94	0.97
Minnesota	0.95	1.04	0.75
Mississippi	0.82	0.96	1.23
Missouri	0.94	1.08	0.98
Montana	0.90	0.88	0.85
Nebraska	0.88	1.09	0.84
Nevada	1.08	0.91	0.93
New Hampshire	0.98	1.03	0.89
New Jersey	1.10	0.93	0.82
New Mexico	0.92	1.11	0.78
New York	1.13	0.98	0.87
North Carolina	0.92	0.93	0.94
North Dakota	0.86	1.19	0.94
Ohio	0.97	0.97	1.05
Oklahoma	0.88	0.98	1.09
Oregon	1.01	0.85	0.71
Pennsylvania	1.04	1.01	1.03
Rhode Island	1.04	0.93	0.91
South Carolina	0.90	1.05	0.94
South Dakota	0.83	1.17	0.85
Tennessee	0.93	1.05	1.12
Texas	0.91	1.08	1.09
Utah	0.89	0.85	0.83
Vermont	0.93	0.90	0.84
Virginia	0.94	1.03	0.99
Washington	1.00	0.91	0.80
West Virginia	0.91	1.05	1.04
Wisconsin	0.93	1.04	0.78
Wyoming	0.88	1.07	0.71

SOURCE: Physician Payment Review Commission analysis.

[a]Targets are based on 1991 national per capita spending, adjusted for demographic and input price indexes.

[b]State spending is based on HCFA state expenditure data for 1991, adjusted for border crossing and uninsured indexes, and to exclude Medicare beneficiaries (Levit et al. 1993).

[c]Medicare spending is based on HCFA compilations for over-65 beneficiaries for 1991, adjusted for differences between Medicare's prices and those of other payers. National averages were substituted for missing hospital adjustments for Alaska, Delaware, and Hawaii.

Improving Data Availability and Addressing Data Errors. In the time between the passage of any health reform legislation and its implementation, it would be critical to collect additional data that could allow targets to be set more accurately. As noted earlier, better state expenditure data and better adjusters are needed, especially adjusters for border crossing and health status. Medicare data might be used in conjunction with other information, but it would be necessary to develop a way to combine different data sources.

The Administration's proposal to collect premium data represents one such effort. Other efforts are under way in some states to improve data availability (see Chapter 16). In addition, upon enactment of health system reform, all payers or all health plans could be required to submit data on utilization and premiums (ideally for a standard benefit package). Such a requirement would allow for developing more accurate baselines before actual premium bids are submitted under the reformed system.

Even if better data become available before reform is implemented, errors in allocating targets to the states are inevitable. Unfortunately, it may be hard to distinguish between an estimation error and the failure of health plans to respond to new incentives by delivering care more efficiently. It may be possible to improve estimates if better data are collected once reform gets under way. If a standard benefit package is adopted, premiums will no longer require adjustments for benefit differences, but knowing actual premiums would be used to enforce limits could open up the process to gaming.

A process should probably be established so that some governmental entity is given the authority to make corrections in state budget targets, perhaps on a budget-neutral basis. Standards should be adopted concerning what sort of evidence is needed to justify such a correction, how quickly adjustments could be made, and whether budget neutrality should be applied.

EXPENDITURE LIMITS FOR SUBSTATE REGIONS

Assuming that substate regions such as those defined by regional alliances in the Administration's proposal might be involved in the budget process, the question is whether or how expenditure limits should be set for these yet-undefined regions. In a system that does not create alliance regions, substate limits would be unnecessary.

As noted earlier, the shift of enforcement from state to substate regions adds complexity because data are not available at the level of substate regions. Even if alliance regions follow the lines of metropolitan statistical areas (MSAs) or counties, aggregate spending data—other than Medicare data—are not commonly available for these entities. Setting accurate historical baseline targets for these regions is likely to be demanding. The Commission is concerned that the difficulties may make it inadvisable to assign expenditure limits at the substate level until better data are available.

Spending Variations among Metropolitan Statistical Areas

In establishing substate targets, a critical question is whether spending variations are the same or greater among regions than among states. The answer may depend largely on how alliance lines are drawn (see Chapters 6 and 7). If, for example, a state's urban and rural areas are kept in separate regions, then interregion variations are likely to be greater than interstate variations. Allegiance to state boundaries may force separation of center-city and suburban regions for cities such as Memphis, New York, Philadelphia, St. Louis, and Washington, D.C.

The Commission has analyzed Medicare adjusted average per capita cost (AAPCC) data for 1991 to look at variations across substate regions. In this analysis, MSAs and the non-MSA (rural) portion of each state were used as proxies for alliance regions.[17] County-level AAPCC data (for over-65 beneficiaries only) were aggregated to the MSA level based on enrollment counts. These data are more advantageous than one-year Medicare claims data because they are more stable and less susceptible to small-sample problems. On the other hand, the AAPCC data for 1991 are based on five-year average costs from 1984 to 1988, adjusted by a uniform trend factor across all areas. As a result, they may not reflect the most current local variations. The analysis focused on all MSAs in five selected states (Arkansas, California, Florida, Iowa, and Pennsylvania). Because they may not be a representative sample of all MSAs in the United States, the results should be interpreted cautiously. Medicare spending per beneficiary is calculated for the MSAs in each state and the non-MSA (rural) portion of each state (Table 5-6).

In general, the variation among metropolitan statistical areas is wider than that among the state averages (Table 5-2). The variation among Pennsylvania MSAs, for example, appears to be especially great. It is clear, however, that the variation among MSAs is far from random. The highest averages are generally in the largest MSAs (Los Angeles, Fort Lauderdale, Miami, Oakland, Philadelphia, and Pittsburgh).[18]

It is interesting to note that Medicare spending for the District of Columbia (either the District proper or its MSA) is in line with these large MSAs. This finding, not shown in the table, supports the contention earlier in the chapter that border crossing remains a problem with the state expenditure data, even after an adjustment is made.

Although smaller metropolitan statistical areas have lower spending in general, the contrasts between similar cities such as Pennsylvania's Allentown and Lancaster are more difficult to explain. Small sample sizes may be a factor, but a more likely explanation might be the well-

[17] Only the in-state portions of multistate MSAs are used in this analysis, replicating the rules in the Administration's proposal. This decision does not change significantly the results of the analysis. Actual alliance boundaries might be likely to combine some smaller MSAs and to attach rural areas to nearby MSAs.

[18] These results are similar to those reported by Welch and his colleagues (1993).

Table 5-6. Medicare Spending and Adjusted National Targets, by Selected Metropolitan Statistical Areas, 1991 (ratios)

State and MSA	Target[a]	Spending[b]	Ratio of Spending to Target
Arkansas			
Non-MSA	0.84	0.80	0.95
Fayetteville	0.85	0.73	0.86
Fort Smith	0.87	0.80	0.91
Little Rock	0.91	0.94	1.04
Memphis, TN	0.93	0.92	0.98
Pine Bluff	0.95	0.74	0.77
Texarkana	0.90	0.90	1.00
California			
Non-MSA	1.01	1.00	0.98
Bakersfield	1.08	1.14	1.05
Chico	1.02	1.01	0.99
Fresno	1.07	0.86	0.81
Los Angeles	1.16	1.47	1.27
Merced	1.04	1.08	1.04
Modesto	1.12	1.01	0.91
Oakland	1.25	1.28	1.02
Orange County	1.17	1.40	1.20
Redding	1.06	0.99	0.93
Riverside	1.11	1.20	1.08
Sacramento	1.13	1.10	0.98
Salinas	1.19	0.98	0.82
San Diego	1.12	1.22	1.09
San Francisco	1.25	1.22	0.97
San Jose	1.26	1.12	0.89
Santa Barbara	1.11	1.05	0.95
Santa Cruz	1.20	1.02	0.85
Santa Rosa	1.22	1.01	0.82
Stockton	1.09	1.06	0.97
Vallejo	1.17	1.09	0.93
Ventura	1.19	1.20	1.01
Visalia	1.08	0.93	0.86
Yuba City	1.06	1.02	0.96
Iowa			
Non-MSA	0.85	0.69	0.81
Cedar Rapids	0.90	0.79	0.88
Davenport	0.92	0.85	0.93
Des Moines	0.95	0.90	0.95
Dubuque	0.90	0.73	0.81
Iowa City	0.96	0.71	0.74
Omaha, NE	0.98	0.93	0.95
Sioux City	0.92	0.80	0.87
Waterloo	0.93	0.81	0.87
Florida			
Non-MSA	0.92	0.97	1.05
Daytona Beach	0.93	0.96	1.03
Fort Lauderdale	1.06	1.45	1.37
Fort Myers	0.97	1.02	1.05
Fort Pierce	1.04	1.05	1.02
Fort Walton Beach	0.91	1.08	1.19
Gainesville	0.96	0.94	0.98
Jacksonville	0.96	1.14	1.19
Lakeland	0.94	0.84	0.89
Melbourne	0.97	1.05	1.09
Miami	1.05	1.61	1.54
Naples	0.91	0.96	1.06
Ocala	0.93	0.85	0.92
Orlando	0.99	1.02	1.03
Panama City	0.94	1.08	1.14
Pensacola	0.91	1.07	1.18
Sarasota	1.00	0.97	0.97
Tallahassee	0.93	0.86	0.93
Tampa	0.96	1.06	1.10
West Palm Beach	1.03	1.22	1.19
Pennsylvania			
Non-MSA	0.93	0.96	1.03
Allentown	0.97	1.05	1.08
Altoona	0.93	0.96	1.03
Erie	0.96	1.00	1.04
Harrisburg	0.98	0.89	0.90
Johnstown	0.93	1.12	1.20
Lancaster	0.96	0.76	0.78
Philadelphia	1.07	1.40	1.31
Pittsburgh	0.99	1.26	1.27
Reading	0.96	0.91	0.95
Scranton	0.92	1.08	1.16
Sharon	0.94	1.07	1.13
State College	0.96	0.95	1.00
Williamsport	0.92	0.99	1.07
York	0.94	0.79	0.84

SOURCE: Physician Payment Review Commission analysis of Medicare AAPCC data.

[a] Targets are based on 1991 national per capita spending, adjusted for input prices.

[b] Medicare spending is based on aggregated AAPCC values for 1991 for over-65 beneficiaries.

documented phenomenon of small-area practice variations. While average spending in rural (non-MSA) areas is below the state average in these five states, spending in a number of the smallest MSAs is even lower.

Some of the variation seen among MSAs may reflect differences that result from input price variations. This hypothesis can be tested by an analysis similar to that used for states. National targets were calculated for each MSA based on the national average AAPCC, adjusted for input prices. Input prices were based on the Medicare hospital wage index (applied to inpatient and outpatient hospital spending) and the GPCI (applied to physicians' services). Ratios between the spending for each MSA and its target were then calculated (Table 5-6).

The adjusted targets for Arkansas, Iowa, and the smaller MSAs in Florida and Pennsylvania are all lower than the national average, reflecting below-average input prices. By contrast, California's targets are all above average. These differences correspond somewhat to the pattern of spending variations among the MSAs. Thus, California's regions are more in line with the adjusted targets than they would be without the adjustments.

Comparing spending to the adjusted targets leads to several conclusions (Table 5-7). First, MSAs generally miss their targets in a similar pattern to the states. About 30 percent of all MSAs are at least 15 percent above or below their targets, compared with 36 percent of the states (using Medicare data). This result might look different, however, if the MSAs in all 50 states were analyzed. Second, even with the input price adjustment, the largest MSAs remain well above their targets and thus would be under significant pressure to reduce spending in the absence of other adjustments.

Policy Considerations for Setting Substate Expenditure Limits

In a system that establishes expenditure limits at the substate level, it may be appropriate to set a different limit for each region. The analysis of historical spending variations suggests that a single statewide limit, even with an input price adjustment, would create significant inequities. The Commission's recommendation for blending an area-specific historical baseline and an adjusted national target, with an increasing weight given to national spending over time, would address this issue to some extent. Economic disruptions could still be substantial, especially in the more heterogeneous states.

It seems unlikely that, under the Administration's proposal, there would be as many alliance areas as there are metropolitan statistical areas. If MSAs are combined with each other or with surrounding rural areas, the variation in spending might decrease somewhat. But the large MSAs with high spending, even after adjusting for input prices, are precisely those areas most likely to stand alone as alliance regions.[19] These spending differences will

[19] See the Commission's earlier work on Medicare payment areas for a discussion of price variation for MSAs and other geographic divisions (PPRC 1991).

Table 5-7. Distribution of Metropolitan Statistical Areas by Spending Relative to Adjusted National Targets

Ratio of Spending to Adjusted National Target	Number of Metropolitan Statistical Areas
0.50 to 0.75	1
0.75 to 0.85	9
0.85 to 0.95	17
0.95 to 1.05	24
1.05 to 1.15	12
1.15 to 1.25	7
1.25 to 1.60	5

SOURCE: Physician Payment Review Commission analysis of Medicare AAPCC data.

NOTE: Targets are based on 1991 national per capita spending, adjusted for input prices. Spending for each metropolitan statistical area is based on aggregated AAPCC data for 1991.

complicate the goal of reducing geographic variations in expenditure limits around the country.

On the basis of this analysis, the Commission has serious concerns about the availability and accuracy of substate data. Medicare data are adequate for illustrating variations but may not be a very good proxy for systemwide spending, as shown in earlier analyses. Other data are not available to estimate per capita spending for substate regions. If provider-based data were used for this purpose, border crossing could create larger discrepancies than at the state level.

In the absence of good data, it seems unlikely that accurate substate targets could be set. The Commission proposes that substantial data development be undertaken in order for expenditure limits to be applied to states or substate regions. It is possible that new data will be available between now and the implementation date of health system reform, if enacted. The ability to set substate expenditure limits should be reevaluated once new data become available.

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CHAPTER 6

STRUCTURING THE HEALTH INSURANCE MARKET IN A REFORMED HEALTH CARE SYSTEM

One of the most controversial issues within the reform debate is how to structure the health insurance market. Because this market is the link between financing sources and health care delivery, its structure will affect the premiums consumers must pay and how care is delivered. Therefore, design of the insurance market under a reformed health care system must reflect what types of plan competition are appropriate and how consumers should be grouped in order to pool risk and ensure access to coverage.

Different proposals lead to vastly different roles for America's insurance companies and managed-care organizations in a reformed health care system. Advocates of single-payer proposals argue that having multiple insurers permits plans to avoid risks and leads to expensive, unnecessary marketing as well as duplicative administrative costs. Other reform proposals promote a competitive insurance industry as a key to cost containment.

All the proposals before the Congress provide for a combination of fee-for-service and managed care plans, reflecting the current choices in the U.S. health system. This includes even the most popular single-payer proposal, sponsored by Senator Wellstone and Representative McDermott, which allows for the presence of managed-care systems. Virtually all other reform proposals are built around the current system of multiple insurers. Most of these advocate managed competition, where health plans compete to enroll consumers. These proposals attempt to address the inherent tension created by the opportunities to avoid or segment risk in a multi-insurer market and the cost control and quality improvement gains expected from market competition. Key to this is eliminating current insurance practices that segment rather than pool risk among consumers through an array of mechanisms. Among these are mandating that plans offer community-rated premiums, that they participate in a coordinated open enrollment process, that they issue coverage to any applicant, and that they receive payments adjusted to reflect the relative health risk of their enrollees.

RECOMMENDATIONS

In a system where health plans compete to enroll consumers, certain rules should be adopted both to encourage competition among health plans on the basis of price and quality and to make it easier to establish equitable premiums. These include such measures as a standard benefit package, coordinated open seasons for enrollment, limits on marketing techniques, a guarantee that plans accept everyone regardless of health status, community rating, and risk-adjusted payments to plans.

One or more entities must be given the responsibility and resources to carry out the functions necessary to organize an effective insurance market and to enforce rules of competition. These functions could be performed either by a governmental entity or by a combination of governmental and private organizations.

This chapter describes the goals of a competition-based health system and how defining the roles to be played by different parties would help meet these goals. It assumes that health insurance is mandated, either through employers or individuals, and that the system is financed through premiums. The first section discusses the objectives of competition-based reform. The second section describes some of the rules that will govern how suppliers are allowed to compete in the marketplace. These rules are designed to promote competition based on price and quality instead of on risk selection. The third section discusses the consumer side of the market and the purchasing groups that many proposals create to represent consumers. The final section discusses how the rules of competition are enforced. As the section suggests, purchasing groups are not necessary for carrying out these enforcement functions.

OBJECTIVES OF COMPETITION-BASED REFORM

High levels and erratic growth of insurance premiums for some consumers and the inability of others to purchase coverage at any price have contributed to the current call for reforming the health care system. These conditions are the apparent result of insurers' medical underwriting and experience rating policies and of the limited influence small groups and individuals have in the market. When acting in isolation, these groups can neither wield sufficient market power to negotiate with a variety of plans nor bear the administrative costs associated with having the choice of several health plans.

Managed-competition reform proposals would redesign the system of multiple insurers to promote appropriate competition. The approach is built around having accountable health plans and purchasing groups or sponsors. Accountable health plans would compete to enroll consumers and assume financial risk for providing necessary and appropriate care to their enrollees. Purchasing groups or sponsors, both corporate and community-based, would represent individual consumers in the insurance market. Some suggest that system reform is unnecessary because small-market insurance reform, such as mandated community rating, would be sufficient to eliminate the problems of small-group and individual purchasers. Others maintain that these problems would be best resolved by abolishing the system of multiple insurers altogether.

Within the competition-based framework, the objectives are to:

- provide consumers a broad choice of health plans;

- foster appropriate competition among health plans (that is, competition based on price and service quality, not on risk selection);
- spread risks and costs broadly; and
- reduce administrative costs.

These goals would be achieved through a combination of market rules and the assignment of certain functions to appropriate entities. Therefore, the reform proposals have included discussion of a variety of insurance market reforms as well as the creation of local purchasing groups as new actors in the market. Through new purchasing groups, individuals and groups experiencing difficulty purchasing affordable coverage would be expected to have options that more closely resemble those of consumers who buy insurance through large employer, union, and government benefits programs.

RULES FOR INSURANCE SUPPLIERS IN A COMPETITION-BASED MARKET

Many see the current insurance marketplace as fertile ground for health plans to engage in risk selection, which in turn leads to high variation in premiums. The multiple-choice environment for insurance appears to reward plans for their effectiveness at risk selection (Jones 1989). Unless carefully addressed, these same incentives would operate in a reformed system based on competing health plans. Even if plans offer the same premiums to all enrollees as required under mandated community rating, groups of consumers will face widely varying premiums if insurers can effectively target healthier populations for enrollment. Therefore, reform proposals typically provide for risk adjustment of payments to plans to account for cost differences associated with enrollee characteristics.

In tandem, community rating and risk adjustment would promote premium equity and reduce plans' incentives to select enrollees on the basis of health risk. Because of their importance to virtually all reform proposals, community rating and risk adjustment are discussed in detail in subsequent chapters of this report (see Chapters 7 and 8). Other measures, such as a standard benefit package, open enrollment, plan standards, monitoring consumer satisfaction, and marketing restrictions, are designed to limit the ability of plans to target certain types of potential enrollees and to insulate plans from consumer-driven risk selection. The effectiveness of these various measures will determine the importance of refining risk adjustment processes to make plans neutral with regard to enrollees' health risks.

Insurance and Underwriting Reforms. Insurance and underwriting reforms, included in nearly all health system reform proposals, would remove the most obvious form of risk selection and establish more equitable premiums for consumers. Under most proposals, guaranteed issue would be mandated; plans would be required to accept everyone regardless of their health status and would be prohibited from dropping people or groups based on

illness, medical condition, or utilization of services. Plans would also be prohibited from excluding enrollees' preexisting conditions from coverage. Some proposals would also limit plans' ability to charge higher rates to sicker enrollees or base premiums on the health risk of the enrolled population, through community rating (see Chapter 7). A mandate for full or modified community rating that prohibits premium differences based on health status must be accompanied by some form of risk adjustment that recognizes health risk differences in actual enrollee populations to ensure the financial viability of plans.

There is strong consensus about the need for reforming current insurance practices, as evidenced by the large number of states that have enacted or are considering such reforms. These activities, coupled with the elements included in reform packages and the recommendations of groups such as the National Association of Insurance Commissioners, suggest that at least some of these insurance reforms are likely to proceed regardless of the particulars of health system reform.

Standard Benefit Package. The adoption of a standard benefit package is one step that would make health plans less able to attract certain groups of enrollees (or exclude others) and help insulate them from self-selection by consumers who expect to need certain services. Currently, the inclusion of extensive maternity benefits and child dental benefits tends to attract younger families, whereas prescription drug benefits attract those with chronic illness. A standard benefit package would also allow consumers to compare plans more easily.[1]

Requiring a standard benefit package has costs, however. It would limit the ability of plans to adapt benefit packages to the needs of different populations. In addition, it would raise the stakes for including a service or group of practitioners, making the process of defining the package a difficult one. A standard package would not resolve all differences in coverage across plans, so that some oversight might be necessary to establish consistent coverage policies and the appropriate use of technology (see Chapter 12).

Open Season Enrollment. The use of common periodic open seasons during which all health plans are made available to potential enrollees would help avoid some forms of exclusionary practices. Although coordinated open seasons would not eliminate all forms of selective marketing, they would give all consumers the same range of choices. This would make it easier for consumers to compare and choose plans, which should promote competition.

[1] There have been previous federal efforts to standardize insurance policies. The Omnibus Budget Reconciliation Act of 1990 defined 10 policies that insurers can offer as supplemental Medicare coverage in an effort to make it easier for consumers to compare coverage of different policies. Although they do not have to offer all 10, insurers who sell any Medigap coverage must offer at least the basic package. This restriction reduces risk selection that may occur if insurers are free to offer any combination of packages.

Medicare's unstructured enrollment process for health maintenance organizations (HMOs) has created the potential for risk selection.[2] Plans tend to control whether potential enrollees learn about their option to enroll. Higher-risk beneficiaries may never learn that these plans are available. Under a coordinated open season, all consumers would have access to basic information about their choices, even though most would not change plans in any given open season.

The use of annual enrollment in conjunction with a common open season also limits plans' ability to encourage higher-risk enrollees to disenroll. Additionally, it keeps consumers from changing plans because of the onset of an illness or medical condition, thus keeping plans from incurring excessive costs related to strategic enrollment decisions by consumers. On the other hand, a longer lock-in period could limit consumers' recourse against plans whose quality of care is inadequate and therefore would likely be viewed as a serious infringement of consumers' rights.

Quality Standards. Under most reform proposals, minimum quality standards would be imposed on plans and quality information would be reported to consumers (see Chapter 10). Standards may help ensure that primary care and specialty services are widely accessible, especially in plans with restricted provider networks, and therefore would reduce risk selection based on service availability. If a plan did not provide good access to oncology care or to endocrinology services, for example, then cancer patients or diabetics would likely be discouraged from enrolling. If a health plan's facilities were not conveniently located throughout the region that it is expected to serve—especially in areas where higher-risk populations are concentrated—then such groups might avoid enrolling in that plan. Standards would make these services more available and reduce the possibility of risk selection by both plans and consumers.

Monitoring Consumer Satisfaction. Information about consumer satisfaction should be collected and publicized. Making such material available to consumers when they choose a plan would foster informed consumer choice and enhance competition. Besides information on general satisfaction, consumers could be told about plans' disenrollment patterns. If, for example, consumers knew that patients with certain conditions systematically switched to other plans, they would be aware of different plans' relative ability or commitment to care for different types of patients.

For regulatory purposes, plan performance could be assessed through tools such as periodic surveys of people who have chosen to switch plans. Switchers, especially those whose health expenditures were extremely high, could be asked whether the plan or its providers had in any way encouraged them to choose another plan, in an effort to identify plan actions to encourage unhealthy enrollees to disenroll. Plans engaging in such activities could be subject

[2] Brown and others (1993) found that Medicare's payment scheme does not fully adjust for the degree to which HMOs enrolled healthier beneficiaries.

to sanctions. Further, reporting these activities would be valuable to those responsible for designing and refining a risk-adjustment system. If people with certain illnesses or medical conditions were systematically switching plans, these could be incorporated as risk adjusters or included under a specified medical-condition pool. Alternatively, such findings could be the basis for a system where plans were placed partially at risk to cover future costs of their former enrollees.

Restrictions on Marketing Techniques. To the extent that plans can strategically market themselves to different groups of consumers, they may be able to avoid enrolling certain high-risk populations. Even if plans offer a standard benefit package and market themselves during a common open season, some observers are concerned that plans will still use marketing techniques to attract healthier enrollees. Current practices used by many large multiple-choice plan sponsors suggest that it may be appropriate to restrict plans from marketing selectively to consumers and to subject plan marketing materials to a preapproval process to protect consumers against misleading statements or techniques that promote risk selection.

The absence of significant research findings about the impact of health plan marketing practices on enrollee characteristics makes it difficult to interpret anecdotes about marketing practices that could be used for risk-selection purposes, such as including health club memberships to attract young, healthy enrollees or marketing plans at second-floor walk-up offices to deter less mobile enrollees. Although there is little evidence of the widespread use or effectiveness of such techniques, some argue that a ban on targeted marketing would preclude such approaches. If such rules are established, plans would have an incentive to report violations by their competitors. Sofaer (1993) notes that it may be critical to limit person-to-person marketing by individual plans and to ban entirely house-to-house marketing activities. She argues that the potential for abuse in such "invisible" contexts is enormous and can be used to encourage enrollment through misleading statements or discourage enrollment among less desirable groups. Restrictions on plans' advertising and other marketing activities, however, may be difficult to enforce and could be subject to constitutional challenge.

The actual practice among organizations offering a broad range of plans places only limited restrictions on marketing. The Federal Employees Health Benefits Program allows most forms of marketing by plans, but requires that marketing materials be submitted for prior approval. Other organizations operating under a managed-competition framework make plan comparison brochures available to potential enrollees. The Minnesota public employee program's brochure includes the results of consumer surveys evaluating the participating plans, with only brief statements written by the plans themselves. A brochure distributed by the Health Insurance Plan of California includes a one-page description of each plan, which each plan writes itself using a standard format.

Risk Adjustment. If plans are prohibited from charging higher premiums to enrollees with high health costs, they will have a strong incentive to avoid insuring such consumers. There

are a variety of strategies for risk-adjusting payments so that plans receive payments reflective of the relative risk of their enrollees (see Chapter 8). If perfect risk-adjustment processes existed, plans would have no incentive for risk avoidance. Since there are no such perfect systems, the framework for a competitive insurance market should include the above measures to reduce plans' opportunity for risk selection.

THE DEMAND SIDE OF THE INSURANCE MARKET

Most managed-competition proposals include provisions to create a new entity that would be responsible for acting as a purchasing agent by contracting with health plans and facilitating consumers' purchase of health coverage. To their architects, these new purchasing groups, such as health plan purchasing cooperatives and health alliances, are an important element of their respective reform proposals. Critics, however, maintain that these entities are an unnecessary new level of bureaucracy.

Insurance Sponsors within Managed Competition

As a vehicle for small groups and individuals to purchase coverage, purchasing groups are in some respects a new type of sponsor that would serve their constituencies in several important ways, much as large firms now serve their employees. By creating bigger insurance pools, such groups would spread risk, insulate individuals from erratic premium growth, and give them a stronger voice in the market for health coverage. In addition, they would act as, in effect, a benefits manager for small firms and individuals. Purchasing groups would be expected to play the traditional roles of corporate benefits managers by, for example:

- identifying and contracting with plans to develop an attractive set of options from which consumers could choose;
- providing consumers with information describing available plans, including patient satisfaction and plan performance;
- conducting open enrollment for all consumers;
- collecting premiums and making payments to plans; and
- helping consumers if problems arise with plans.

The authors of different reform proposals have advanced a wide range of strategies for carrying out these functions. These strategies are as heterogeneous as those now used by corporate benefits managers. In some reform constructs, the purchasing groups would be a rather passive actor, simply offering all qualified plans and providing consumers with information received from plans, much the way many benefits managers have functioned

historically. In other reform constructs, the societal benefits manager would act as a prudent buyer that carefully selects which plans to offer, again emulating the role some corporate benefits managers have assumed in recent years.

Corporate benefits managers have engaged in a variety of cost-containment activities. In some cases they have been actively involved with other community leaders in designing and implementing dramatic changes in a local care system. On a more modest level, others have changed the way in which they share health benefits costs with their employees. For example, many companies formerly contributed a fixed percentage of the premium required by whatever plan an employee selected. As premiums for some plans started growing faster than those for others, however, many benefits managers were confronted with the choice of either limiting employees' options to lower-cost plans or changing the cost-sharing arrangement so that employees selecting costlier plans paid a relatively higher share of their premiums. Recently, benefits managers have tended to become more active shoppers for plans in an effort to contain cost growth and maintain an acceptable level of quality. They have worked with insurers to develop products that address the needs of their employees. They have also held plans accountable for quality and consumer satisfaction, with the ultimate threat of withdrawing their business from plans that do not meet their requirements.

Although there are similarities between the functions performed by corporate benefits managers and those expected of a new type of sponsor under competition-based reform proposals, there are some important differences, particularly concerning the related issues of community rating, risk adjustment of premiums, and risk assumption. Because firms have not typically engaged in risk adjustment, an enrollee in a plan that attracts a higher-risk group has typically faced higher premiums, even if the benefits package and quality are comparable to those of other plans. Many managed-competition proposals, however, have described the purchasing groups as involved in risk-adjusting payments and as defining the community for premium determination purposes. Reform proposals would not put purchasing groups at financial risk. Private sponsors, on the other hand, are at financial risk when they self-insure or are experience rated.

Market Dynamics and Purchasing Groups

Under many reform proposals, both corporate and local purchasing groups are expected to act as purchasers in a reformed insurance market. The design of these purchasing groups will have a major effect on the number of actors in and competitiveness of the insurance market, the opportunities for risk segmentation, and the variation in premiums paid by and options available to consumers in different groups. How the market will function will depend on:

- whether participation in purchasing groups would be mandatory or voluntary;
- whether groups should serve overlapping populations or have unique service areas; and

- whether large employers could opt out of the purchasing group process, which will determine the share of a market's consumers who would purchase insurance through the purchasing groups.

Just as the rules for competition on the supply side are designed largely to avoid risk segmentation by plans, purchasing group design must balance system gains expected from the presence of many insurance purchasers, which promotes innovation in delivery and service, against variation in premiums across groups of consumers. These design issues embody the equity versus efficiency debate inherent in market regulation. Whether competition among different purchasing groups, fostered by having voluntary or overlapping groups and exempting certain employers, would contribute to overall system efficiency and whether the resulting premium variation is acceptable need to be determined. Efforts to minimize premium differences, such as community rating and risk adjustment across groups, would change the incentives for individual firms or groups to act as aggressive purchasers.

It is widely accepted that large firms, which have typically been able to provide reasonably priced insurance options to their employees, should be allowed to continue to act outside of any local purchasing group. Presumably, premiums for employees of these firms and for consumers who purchase insurance through local purchasing groups would differ. The continued presence of large firms in the health insurance market is expected to enhance competition because they are experienced at purchasing insurance for their employees and have learned how to work with health plans to create services that address consumers' needs.

Exempting larger firms from local purchasing groups would also, however, perpetuate some segmentation of health risks and differential premiums faced by different groups of consumers. If, for example, large firms represent relatively healthier people and are not part of a community purchasing group, premiums would be higher for employees in smaller firms and for individuals, even if the premiums for all three were community rated (see Chapter 7). Excusing large firms from local purchasing groups could also perpetuate cost-shifting practices, if these firms could draw on their negotiating experience to develop terms with the plans that do not cover all costs and plans, in turn, are able to charge other purchasers more.

To enhance competition in the insurance market, some advocate creating many groups of consumers, including voluntary overlapping purchasing groups and employer-based groups. But this would also allow for dividing a given population's health risk, which is contrary to some reform goals. Differences in premiums, services, or options across groups in a particular area may reflect either the groups' ability to work effectively with plans to develop choices for their constituents or differences in their enrollees' health status.[3] Having many different consumer groups would promote market competition only if some could offer their

[3] If insurance is not mandated, then systemwide risk selection will occur because the healthiest consumers are the least likely to purchase insurance. Requiring coverage, either through employer or individual mandates, is, in effect, another tool for minimizing risk segmentation and creating a broad base for spreading risk.

constituents more attractive choices than their competitors. If this were the case, consumers with less attractive choices than their neighbors would probably try to switch. If any difference in premiums or choices between these groups was attributable to different service needs, this migration would presumably erode the differential over time. If such shifting is forbidden or discouraged, however, then premium differentials between different groups of consumers could become institutionalized, as in the case of large employers opting out of the local purchasing group. This has occurred in some current efforts to create voluntary purchasing groups; in some instances, groups have resorted to medical underwriting to insulate themselves from the costs associated with certain prospective members.

The propensity of firms to opt out of the local group would be affected by differences between the premiums of their insurance policies and those available through local groups, which would be determined by their relative effectiveness in the market and by the health risk of their employees. Proponents of exempting large employers from local purchasing groups hope that the entire health system will benefit from their experience of negotiating with plans and fostering innovation. They argue that all consumers in the community benefit if there are many large, active insurance purchasers because they not only will make the market more competitive but also will promote innovations in service delivery. Their market presence is expected to curb cost growth and create choices systemwide (not just for their employees), largely through their continued activities as experienced, innovative purchasers of coverage. If their market involvement leads to the development of more cost-effective health care delivery and insurance options systemwide, those in the local purchasing group may be better off, even with ostensibly higher premiums, than if competitive and innovative pressures were eliminated by requiring everyone to purchase through a single local purchasing group. If local purchasing groups eventually developed the same expertise and effectiveness as some active corporate benefits managers, any advantage enjoyed by firms working outside the local purchasing group might diminish, leading them to join their local groups.

Firms' ability to offer attractive options to their employees may also be the result of differences in health status, a form of risk segmentation that may not be desirable. There are several ways to reduce the differences between premiums or options available to various consumer groups due to differences in health status, such as limiting variation in premiums or risk adjusting payments across groups. Such measures could, however, change the incentives for these firms to act independently as aggressive purchasers on behalf of their constituents. Take, for example, a self-insuring large employer with a relatively healthy work force that is required to make payments into a local risk-adjustment system. This employer may no longer perceive any benefit from self-insuring and so may, under a required risk-adjustment scheme, switch into the local purchasing group, thereby reducing the number of independent consumer groups in the market. Conversely, without a risk-adjustment process, a firm with an aging work force that had been aggressively trying to reduce health costs would likely choose to enroll its employees through the local purchasing group, where it would benefit from broader risk sharing. Even in the presence of across-group risk adjustment, both firms would still benefit from participating independently in the

market if they are effective at working with plans to develop packages that address their employees' needs.

These same issues arise with the other strategies for creating a large number of consumer groups. Overlapping and voluntary groups are expected to enhance competition, but also create the opportunity for risk segmentation. In a market with these types of purchasing groups, many of the same risk-avoidance incentives discussed above with regard to health plans would exist for purchasing groups. Such systems would require rules governing purchasing groups like those for plans, such as guaranteed issue, to ensure that all consumers would have access to coverage through a purchasing group.

ENFORCING MARKET RULES

Under any design, the following functions will be required to create the market framework for successful competition-based reform:

- certifying the plans that will be permitted to compete;
- enforcing rules of competition (that is, ensuring plans do not engage in risk selection, medical underwriting, or exclusion of preexisting conditions); and
- adjusting payments to reflect risk differences of plans' enrollees.

Three approaches have been proposed to performing these functions: government, mandatory purchasing groups, and voluntary purchasing groups. Assigning these roles to government would involve broadening of responsibilities already carried out by states. State governments regulate health insurers and managed-care organizations with regard to financial solvency and place restrictions on benefit packages and how insurers compete. In some cases, there are additional requirements on Blue Cross Blue Shield plans, such as guaranteed issue. State regulation also addresses quality of care available through managed-care organizations. Until recently, states have not been involved in risk adjusting payments to plans, but a few have begun to do this (see Chapter 8).

Under a system of mandatory purchasing groups, a single group for each region would perform these functions. As with the government, these groups would play a passive role in the market because of concerns raised by their mandatory nature. But the passive stance leads to questions about their ability to perform some of their purchasing functions effectively. For example, a mandatory purchasing group would have to offer all plans meeting basic requirements rather than selecting a more circumscribed set of presumably efficient plans. While voluntary purchasing groups would have the advantage of aggressively representing the interests of consumers, they would be limited to certain functions, leaving others to government. The purchasing group could, for instance, select health plans to be offered,

establish rules for plans to compete for their enrollees, and adjust payments to plans on behalf of its enrollees to reflect differences in risks. But government would have to manage competition among competing purchasing groups. This role would include barring practices through which groups could attempt to serve relatively healthy individuals. A role for government would also be necessary to transfer funds among the purchasing groups to offset any remaining pattern of risk selection.

Developing a process for these intergroup transfers would be easier if everyone was required to enroll in a purchasing group. But under a voluntary approach, some people could choose to circumvent the group by buying directly from health plans. They could also have difficulty joining a group. As a result, government would still be needed to ensure that payments to plans on behalf of direct purchasers are risk adjusted and that funds are transferred across purchasing groups. Thus, the benefits expected from voluntary purchasing groups as consumer representatives must be balanced against the need they would create for additional rules and regulations to guarantee that all consumers have access to insurance and face equitable premiums.

In summary, whether or not voluntary purchasing groups play a role in structuring the health insurance market, responsibilities remain for government. These functions must be recognized in health system reform legislation so that the necessary activities are authorized and funded.

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CHAPTER 7

COMMUNITY RATING OF HEALTH INSURANCE PREMIUMS

Insurance premiums that are equitable for consumers and health plans alike are a critical component of various health reform proposals. Regardless of their position on expenditure limits or employer mandates, most bills before the Congress call for some reduction in the current inequities in premiums faced by consumers. Some of these proposals call for full community rating, where a plan must charge the same premium to each person with the same coverage in a particular geographic area. Others would allow plans to modify that community rate for certain factors. As a direct consequence of this partial or complete leveling of premiums, health plans may face inequities in the payments they receive, depending on the mix of people they enroll. As a result, most proposals incorporate some mechanism for risk adjustment of premiums so that plans' receipts more closely match the expected costs of their enrollees.

Policymakers seem to agree that the insurance market has evolved in undesirable ways, because many individuals bear a large financial burden associated with their health status. Health system reform is aimed at correcting these market defects. Under most proposals, consumers would pay a true or modified community rate that does not reflect their health status, although it might reflect local price levels and their community's propensity to use health services. Plans would establish premiums based on expected health costs of the average person in the community and receive a risk-adjusted payment.[1] Together, these two concepts would reduce plans' incentives to segment consumers by health status and ensure equitable premiums.

Community rating and risk adjustment are linked to the idea of spreading risk and costs within a community or geographic area. Implicit in community rating is the view that, unlike health status, geographic proximity is an appropriate criterion for grouping consumers. To ensure plans' financial viability, the risk-adjustment mechanism must relate logically to the same geographic constructs as community rating. This is illustrated by recent changes in New York State, which created seven regions for risk adjustment when implementing its community rating law in 1993. In general, the geographic regions used to establish equitable premiums need not be the same as the regions used for other administrative functions like insurance regulation. This chapter describes some of the issues that must be considered if community rating is mandated as part of health system reform. Chapter 8 addresses issues associated with risk adjustment.

[1] The combination of community rating and risk adjustment can be implemented in alternative ways that all achieve the same result (see Chapter 8).

RECOMMENDATION

Premiums paid by consumers should be community rated, meaning that premiums would be uniform within defined classes that apply to all plans. Health status, race, and sex are not appropriate bases for defining classes. To ensure plan viability under mandated community rating, a mechanism is needed to adjust payments to health plans to reflect the relative risks of those they enroll. The geographic areas to which community rating would apply should, at a minimum, include entire metropolitan statistical areas regardless of state boundaries.

Despite widespread support for community rating as part of system reform, there has been very little examination of how consumers should be grouped for the purpose of developing community-rated premiums. This chapter explores the concepts underlying community rating and some of the issues that it raises within the context of health care reform. These include identifying acceptable premium classes and pools to which community-rated premiums apply, creating community rating areas (CRAs), and considering the implications CRAs might have for developing consumer purchasing groups. It discusses community rating within a premium-financed system that has an insurance mandate applicable to either employers or individuals.[2]

The first section discusses the principle of community rating and the issue that it raises with regard to fair compensation of health plans for cost differences due to variation in enrollee characteristics. Community-rated premiums are intended to distribute health costs across people more equitably than is now the case, limiting differences to acceptable premium classes and across rating pools, as described in the second and third sections. The fourth section looks at three factors that will generate variation in community-rated premiums: the demographic characteristics and health status of an area's population; consumer and provider behavior; and local market factors such as price levels and wage rates. Finally, the chapter considers how the development of community rating areas should be guided by decisions of how much within-area and across-area variation is acceptable due to each of these different factors. This final section also describes the relationship of CRAs to purchasing group areas and some of the implications of creating CRA borders and premium differences in different locations.

BACKGROUND

In the current insurance market, people pay different premiums depending on whether they obtain insurance as individuals, as members of small groups, or as employees of large firms.

[2] Without a mandate, risk selection will occur between purchasers and nonpurchasers of coverage, which could affect some of the issues analyzed here.

In the large-group market, consumers generally are charged a community rate in the sense that all employees of a given firm pay the same premium if they purchase the same coverage. The firm is charged a premium that may reflect both its ability to bargain effectively with insurers and its employees' characteristics. For smaller groups, premiums may be identical for all individuals within a group, but the group's premium is likely to vary by the group's size, prior use of health services, preexisting medical conditions, type of business, or age distribution. In the market for individual coverage, premiums typically vary by age, sex, and health conditions. In fact, some individuals and small groups may be denied access to insurance altogether.[3]

From the health plan's perspective, premium income may reflect a wide variety of factors, including the plan's marketing strategy, its contracts with providers, and the competitiveness of its market. If the risk profile of the plan's enrollees is below average, lower health costs may make the plan more profitable or better able to attract enrollees from competitors through relatively low premiums. If a plan's enrollees have higher health risks, its profitability or ability to compete in the current marketplace may be threatened.

The principle of community rating underlies virtually all health system reform initiatives. The idea of community rating, that an insurer must offer the same premium structure to all consumers to which it sells coverage, is straightforward. Except for single-payer proposals, most reform proposals include premium classes, which allow for premium differences for certain characteristics (such as individual versus family). These proposals also create several types of insurance pools, within which premiums would be equal (that is, community rated) but across which premiums might differ. For example, most plans would allow larger firms to continue to provide insurance for their employees at rates different from those in the small employer and individual insurance market.

Insurance in general is designed to share risk by transferring money from one group of consumers to another. In the case of homeowners' insurance, for instance, fire victims' losses are replaced by their fellow subscribers' premium payments, so the transfer is from homeowners who do not suffer such losses to those who do. As for health insurance, under both community rating and other current practices such as experience rating, the transfer is from those within an insurance pool who use little or inexpensive health care services to those using more or costlier services. One impetus for the current move to reform the health care system is that insurance practices have so fragmented consumer pools that some people must bear an unacceptably heavy financial burden for health care services. By identifying insurance pools that have more homogeneous health costs, plans have been able to market relatively inexpensive products to low-cost groups. But since this practice minimizes the transfer between low-cost and high-cost consumers, it leaves high-cost groups in pools with relatively higher premiums or, in some cases, without access to insurance at any price.

[3] For an analysis of premium variation attributable to these various factors, see the recent study by the Congressional Research Service (1994).

Reform is expected to address concerns about the growing number of uninsured Americans and those in the individual and small-group markets, where health status or small risk-sharing pools can lead to high premiums.

Some form of community rating is the proposed solution to this problem in virtually all the current health reform proposals. The strength of community rating is that all consumers would belong to large pools, so that the cost of a given population's health risks is borne by high-cost as well as low-cost consumers. The Commission supports community rating of insurance premiums.

Presumably, insurers and managed-care organizations would be reluctant to develop true community-rated premiums for a heterogeneous population unless they could be guaranteed an enrollee group with lower-than-average or average health risks. Therefore, developing a process for risk adjustment of payments to plans within a premium area has gained support, despite concern over the data needs and immaturity of the science of risk adjustment (see Chapter 8). An accurate risk-adjustment process would allow plans to offer community-rated premiums, liberate them from worrying about risk selection so that they could focus solely on cost-effective delivery of care, and ensure they would receive fair payment, given their actual subscriber groups. Some such system would be necessary to reduce the incentives to plans to select less risky populations from a heterogeneous group of consumers. If homeowners' insurance premiums were not allowed to vary by structure type, for example, insurers would be inclined to develop strategies to avoid insuring frame houses. Similarly, if health status is rejected as a premium class without a risk-adjustment scheme, insurers may try to avoid insuring people with certain conditions or diseases. Other tools, such as open enrollment and a standard benefit package, are included in reform proposals to limit plans' ability to avoid higher-risk enrollees (see Chapter 6).

PREMIUM CLASSES FOR COMMUNITY RATING

A complete description of a community rating scheme must include the definition of acceptable premium classes, if any are to be permitted. The definition of such classes should reflect those characteristics society is willing to use to apportion risk and so permit class membership to be associated with different premiums. Unless addressed explicitly, community rating can lead to inter-consumer transfers in many dimensions, such as from individuals to families. Within a community rating scheme, premium classes can be constructed to avoid such undesirable transfers. Premium classes can be defined along a variety of dimensions, including family status and other demographic characteristics, or health behaviors like smoking or regularity of exercise. With premium classes, consumers are grouped so that they bear more directly the health costs of shared characteristics.

The Administration's proposal defines four classes based on family status: single, couple, single-parent, and two-parent families. The Chafee and Cooper proposals also include age-

based premium classes. In all three reform plans, the magnitude of premium differences across classes is constrained. While New York State's community rating law prohibits classes based on age, sex, occupational category, and health status, it allows them for place of residence, benefit differences, and family status. Health status, claims experience, and policy duration are all forbidden in determining premiums under Maine's new community rating law, but family status, smoking status, group size, and participation in wellness programs are acceptable.

The widespread use of family status to define premium classes reflects common agreement that having the same premium for individuals and families represents an unfair transfer from single people to families. Conversely, it is the de facto grouping of certain types of high-risk consumers into some policies and plans that has led to the current debate, suggesting that health status would not be a widely acceptable criterion for defining premium classes. The Commission recommends that health status, race, and sex be prohibited as factors for defining premium classes.

If all characteristics that explain differences in health costs were used to define premium classes, no risk adjustment would be necessary. In this case, consumers would bear the cost of characteristics related to higher health care use and plans would receive premiums that reflect expected enrollee costs, as is now the case. But premiums that are equitable from the perspective of consumers are not necessarily equitable from the plans' standpoint. Factors like health status, which are correlated with costs but are considered unacceptable as premium class definitions, are thus likely to be important for effective risk adjustment of payments to plans.

INSURANCE POOLS FOR COMMUNITY RATING

Insurance spreads risk across a pool of consumers. Therefore, in addition to identifying acceptable premium classes, a community rating scheme must identify the pools—or identifiable group of consumers—to which premiums apply. Mandated community rating means that within a pool, all consumers would face the same premiums for the accepted premium classes. Therefore, the designation of pool membership determines the premiums that any particular individual will face. In most managed-competition reform proposals, pools are defined by employer groups and local purchasing groups (for example, health alliances or purchasing cooperatives) while single-payer proposals are based on state pools or one single nationwide pool.

In the past, Blue Cross Blue Shield (BCBS) plans developed community-rated premiums that were available to anyone in a particular area. As commercial insurers started attracting lower-risk groups by offering less expensive, experience-rated premiums, the population served by many BCBS plans was, by default, a higher-risk and therefore costlier group, so that community-rated premiums rose quickly. This fragmentation of consumer risk pools reduced the degree of transfer from low-risk to high-risk consumers. Eventually, BCBS plans

experiencing this "death spiral" had to abandon community rating and engage in some of the practices that had allowed commercial insurers to attract lower-risk groups.

Without insurance market reform, community-rated premiums based only on an insurer's group of enrollees could exhibit the same variation seen in today's market to the extent that insurers could successfully market to particular groups of consumers. Therefore, community rating would better achieve the goals of more equitable premiums and availability of insurance if coupled with other insurance market changes such as open enrollment, guaranteed issue, approved marketing strategies, and risk adjustment of payments to plans. Community rating's contribution to this package is to specify the dimensions along which risk segmentation is appropriate through premium classes and to define the groups or pools to which the same premiums must be offered.

A potential difficulty arises when natural pool definitions lead to some segregation along dimensions considered unacceptable for defining premium classes, such as health status, race, or sex. This is particularly problematic when such differences in pool characteristics lead to different premium levels. If, for example, all women of childbearing age worked for small firms that participate in local purchasing groups and all young men worked for large firms exempted from purchasing groups, then the large firms that define their own insurance pools would be able to offer lower community-rated premiums to their employees than the small firms. If the gender difference of the two groups was responsible for the premium difference and if society is committed to insulating women from some of the health costs related to childbearing, then one of several possible solutions must be adopted. Large firms should not be exempted from the local purchasing group, insurers must be required to develop a community-rated premium schedule that combines the two pools, or a mechanism to adjust for such differences would be needed to transfer funds across the pools.

Any of these efforts to adjust for differences in pool characteristics presumably would make large firms less interested in purchasing insurance outside of the local purchasing group. If the active involvement of large insurers was an important element of the insurance marketplace and the incidental segmentation by sex was acceptable, however, then the premium differences associated with employer size would be acceptable (see Chapter 6).

Beyond employer-specific groups, the pool or group to which an insurer is bound to offer a given set of community-rated premiums needs to be defined. Both the BCBS experience with community rating and the design feature of most reform proposals that calls for using local purchasing groups as community-rating pools implicitly link the concept of community-rating to geographic proximity of consumers.[4] Neither, however, provides a clear framework for determining what, in fact, defines the community on which premiums should be based and to which they apply. Underlying the idea of subnational community rating is the view

[4] While most proposals use geographically defined areas as community rating pools, community rating pools could be defined by other characteristics such as industry.

that geography, unlike health status, is an unacceptable criterion for segregating consumers. In a system based on plan competition, the tools of community rating, open enrollment, regulated marketing, and risk adjustment will work together most effectively if they apply to a well-defined group of consumers, which in this case is likely to be defined by geographic boundaries.

FACTORS THAT CREATE GEOGRAPHIC VARIATION IN PREMIUMS

To the extent that health care costs differ across insurance pools, the use of geography to assign consumers to a particular insurance pool would lead to premium variation across pools. Even under community rating, where health status is not acceptable for creating premium classes, premiums might vary between two pools because of differences in the health status of each pool's enrollees. Consider, for example, two neighboring towns with different per capita health costs as two small potential insurance pools. Creating one bigger pool by combining the two towns for community rating purposes, given a premium class structure, would lead to a transfer from enrollees in the low-cost community to their higher-cost neighbors. Society's willingness to create this transfer is likely to depend on the reason for the difference. If the two towns had virtually identical populations that showed different propensities to consume health care services, then policymakers may be inclined to keep them separate. On the other hand, if the high-cost town had a much sicker population, it may be perceived as appropriate to combine the two and have the low-cost community help pay for the cost of care for the sicker population. The fact that specific information about the two towns might affect the decision about the appropriateness of combining them into a single insurance pool (or community rating area) indicates the importance of explicitly identifying the reasons for any variations in community rates for different consumer pools.

Community rating areas should be defined that clearly specify the population upon which insurers' premiums should be based and for whom community-rated premiums would be available. Efforts to segment risk would be more effectively thwarted if plans were required to offer community-rated premiums to all interested consumers within a well-described geographic area, which would also be the basis for risk adjustment of payments to plans.

States that have mandated community rating have integrated community rating and risk adjustment in several ways. In New York, for instance, plans can define their own service areas, as long as they include entire counties. These service areas may be further apportioned for risk-adjustment purposes if they cross the regional boundaries used for risk-adjustment pools. In this case, counties can be regarded as, in effect, CRAs that plans can aggregate but cannot divide. The use of common areas to integrate community rating with risk adjustment was part of Minnesota's original plan for implementing its new health reform legislation, but has been put on hold during the initial implementation phase. The state was concerned that without such common area definitions, plans could, in effect, continue to avoid serving higher-risk individuals through their choices of service areas. Minnesota has yielded to

commenters' suggestions that risk adjustment and reinsurance would effectively minimize such activity, but the state intends to reexamine this issue.

Community-rated premiums would vary for the same reasons that per capita health costs differ in different communities. As seen in both micro-level studies of health care delivery systems and more aggregate analyses of health care expenditures by city, state, and region, the factors that drive per capita cost differences fall into three general categories:

- demographic characteristics and health status of the local population;
- consumer and provider behavior; and
- local market factors, such as price levels, wage rates, and provider supply.

The development of community rating areas should be guided by some notion of how much within-area and across-area variation is acceptable due to each of these different factors. To the extent that these factors lead to different CRA definitions, they need to be ranked or a method found to resolve the differences. In fact, concerns about spreading health risk suggest that larger CRAs are preferred, while unease about local price variation would lead to smaller CRAs. Geographic differences in consumer and provider behavior may be less important in establishing CRAs because these are expected to be reduced in a reformed system.

Demographic Characteristics and Health Status

Health costs vary with regard to a variety of demographic and health characteristics. Through community rating with limited premium classes, however, characteristics like health status are expected to play little or no role in the premiums faced by an individual in a reformed health care system. But there has been little discussion about how much premium variation due to these characteristics should be allowed across areas. To the extent that age and health status vary geographically, young healthy people, for example, will pay, in effect, a tax that varies with the local population's characteristics. The variation in community health costs attributable to demographic and health characteristics may be significant. For instance, the age and sex index discussed in Chapter 5 (with a national average of 1.00) ranges from 0.91 in Utah to 1.03 in Florida. Without careful attention to the definition of premium areas and the sources of variation across areas, consumers may be so grouped that the implicit subsidies from the young to the old or from the well to the sick are of different sizes in different areas.

The creation of large community rating areas is expected to minimize the likelihood that there would be important across-area premium differences because of these factors. Premium variation could be reduced by establishing, perhaps, some maximum across-area variation attributable to these factors for use in defining community rating areas. An alternative approach might be to create an across-area transfer mechanism to adjust for important cost

differences owing to these factors. This is equivalent to combining these areas along these dimensions. Such a mechanism mirrors risk adjustment of payments to health plans to compensate for the extra costs of plans with higher-risk enrollees. Either approach—setting some maximum acceptable variation across areas that could not be surpassed in creating premium areas or establishing an across-area payment scheme—would address the fact that no societal benefit is gained by creating the location incentives that may accompany premium differentials due to demographic characteristics and health status of a local population.

Consumer and Provider Behavior

Although not easily disentangled, variation in per capita health costs may result partly from the propensity of different groups to use health care services or from differences in provider practice patterns. Arguably, individual consumers should be protected from any excessive costs resulting from provider behavior in a community. It would be difficult, however, to require those in other areas to subsidize this behavior. In fact, from a cost-containment perspective, it may be important to isolate consumers in areas where provider behavior is thought to increase costs. If these consumers do not think the higher costs yield higher quality care, they will either switch to lower-priced providers entering the local market or will pressure local providers to change practice patterns. From a consumer equity perspective, premium areas should be homogeneous with respect to provider practice patterns, avoiding a tax on consumers in efficient, low-cost markets and making consumers aware of costs and quality. Plans may perceive the relative importance of premium areas being homogenous or encompassing variation in consumer and provider behavior differently.

Plans' concern over within-area variation due to consumer and provider behavior will differ with regard to their ability to affect that behavior and the opportunities for entry in the local market. Managed-care plans presumably are more able than fee-for-service plans to influence consumer-driven demand and provider practice variation.

In general, reform is meant to reward plans having more cost-effective practice patterns. Depending on the ability of other plans to enter the market—or change consumer or provider behavior—efficient plans could reap (short-term) profits if premium areas were defined to encompass providers with different practice patterns. Conversely, less cost-effective plans would have strong incentives to speed their transition to more effective care delivery patterns if they share areas with more efficient plans. Although segregating areas depending on provider behavior would avoid creating surplus profits for efficient plans, it would also reduce the incentives for behavior change in areas with less cost-effective practice patterns. In this case, the major impetus for change would presumably come from consumers who determine whether they would be willing to continue paying for particular care patterns. In a competitive environment, providers would presumably converge toward cost-effective care patterns through the combined pressures of informed consumer choice and competition from other plans. Therefore, variation in consumer demand and provider care practices should be viewed as a short-term consideration in developing CRAs.

Local Market Conditions

Wages and prices for offices, equipment, and supplies also affect the variation in per capita health costs. For example, the geographic adjustment factor of the Medicare Fee Schedule for a typical service, which is designed to capture differences in input prices, varies between 0.86 and 1.20 for metropolitan areas and state rural areas. In general, health costs and premium levels will be highly correlated with local price levels (PPRC 1991). Consumers in high-price communities will tend to receive higher wages, so interarea premium differences attributable to local price levels may not be of concern from a consumer equity perspective.[5] Insofar as local market prices and wages reflect scarcity of resources such as land, for instance, combining areas with different price levels would create perverse economic incentives by insulating consumers and producers from local prices. Distribution of labor supply and market competitiveness could be distorted by premium areas that combine communities with different price levels. Conversely, if current price levels, labor supply, and health market competition are already distorted because of existing health system characteristics, it may not be desirable to institutionalize them through premium areas and levels.

To avoid creating transfers from low-price to high-price communities, premium areas should encompass markets with homogeneous price and wage levels. There is likely to be tension between developing premium areas large enough to provide broad risk sharing, for instance, across demographic characteristics and health status, and not combining areas with different price and wage levels.

CREATING COMMUNITY RATING AREAS

The creation of community rating areas is a political process, but there may be analytic guidelines that could inform that process. Establishing the relative importance of the three factors discussed above in the construction of community rating areas will be a necessary step. As suggested, there may be tension related to equity, such as the cost to a community of its health status versus the need to establish an efficient system that avoids creating perverse incentives by combining high-price and low-price areas. There is also tension in trying to develop areas that are small enough to match the communities that plans actually serve, yet large enough to provide stable and predictable enrollee populations for a number of competing plans. Until decisions are made about the insurance market structure and what types of pools that will exist, it is difficult to analyze these factors empirically. Population-based estimates may not reflect the characteristics of employees of small firms, for example. Analysis is thus confined largely to the incentives and distortions these factors are likely to create, rather than the size of premium differences for which they account.

[5] The importance of wage variation changes under a single-payer or payroll tax scheme. Earnings differentials, both across and within markets, change the basis and magnitude of transfers between citizens. In some European systems, there are incentives for insurers to market selectively within certain industries.

Role of Health Status, Consumer and Provider Behavior, and Local Markets

Of the three factors examined above, premium variation attributable to differences in community health status is the most troublesome because it raises consumer equity issues without any enhancement of health system efficiency. The fact that the size of the implicit transfer from healthy people to others varies geographically creates location incentives that do not promote more effective use of health resources. The health status, and therefore expected health costs, of a community should not affect location decisions. A number of strategies, such as risk adjustment of payments to plans, can reduce the impact of demographic characteristics and health status on system efficiency by insulating plans and providers from the costs associated with covering and caring for costly patients. The Commission has concluded that geographic variation in premiums due to differences in the health status of different communities should be minimized.

The other factors—consumer and provider behavior and local market conditions—are different in several important ways. Most important, they can change more quickly and, indeed, should change if reform creates incentives for the delivery of cost-effective care to informed consumers. Second, they are factors associated with price differences for goods other than health care and are more commonly accepted and understood. Indeed, urban residents probably consider high per capita health costs as a reflection of high price levels in cities, instead of a combination of price, health status, and behavioral differences. Insulating communities from variations in consumer and provider behavior and local market factors may create equity concerns (e.g., low-utilization communities subsidizing those with high-utilization) and decrease efficiency incentives (e.g., consumers in high-price areas do not bear costs associated with providing care in these areas because of transfer from consumers in low-price areas). Available measures suggest that prices vary more geographically than health status. But, as noted earlier, a population-based health status measure may not accurately reflect health status of particular pools within a community, if the market structure allows more than one pool.

This again illustrates the tension between the need to create CRAs large enough to insulate communities from differences in health status and small enough to capture local price levels. Premium variation caused by differences in health status across CRAs might be reduced by establishing some maximum allowable premium difference and broadening CRAs until measurable health risk differences are within some acceptable limit. The drawback of this approach is that it might include in a single CRA communities with different price levels, contradicting the principle that prices should not vary widely within CRAs. The alternative suggested above—creating a mechanism for across-CRA payments to offset differences in health status—would allow CRAs to be defined on the basis of local price variation, while insulating consumers from premium variation attributable to local health status. Such a mechanism could be an important policy tool to ensure that geographic variation in insurance premiums was caused by acceptable factors, such as price level differences, rather than by geographic variation in health status.

Policy in this area could be informed by analysis of the correlation between key dimensions of health status and local price levels. If they were not highly correlated within, for example, metropolitan areas and the rural parts of states, then these areas might serve as reasonable CRAs. On the other hand, if they are correlated so that, for example, metropolitan areas have lower health status and higher prices, then policy must be guided either by a decision that one of the two factors is more important or by a strategy like the across-CRA payments which acknowledges differences in both. Under the first scenario, policymakers may determine that since price levels explain a larger share of the variation in per capita health costs, it is appropriate to define CRAs in a manner that matches market areas, even if this also apportions consumers on the basis of health status. Conversely, the second policy approach could use metropolitan areas and state rural areas as CRAs because of their ability to capture price variation, but would allow for across-CRA payments to compensate for the differences between CRAs in health status that this definition would create.

The analysis of price and health status variation within and across potential CRA definitions is more complicated in the cases where firms of a certain size are able to act independently of local purchasing groups. As essentially their own communities, large firms may have community-rated premiums that differ significantly from those available through the local purchasing group. Indices of health risk will differ for the local purchasing group pools depending on the size of the firms exempted from local purchasing groups and the relative health risk of this group. Analytically, large firms can essentially be either premium classes or CRAs themselves. In this case, demographic factors and health status presumably would be responsible for the premium differences between a local purchasing group and a local large firm, since they are operating within the same provider systems and market areas. (Consumer behavior could presumably differ somewhat.) Limits could be placed on premium differences allowed or payments could be made to compensate for differences in group health risk. Such premium-equalizing strategies may diminish the incentives for firms to remain independent actors in the insurance market and so could affect expected market dynamics (see Chapter 6).

Although the Commission agrees with the notion that premium differences among communities (or firm-based plans) attributable to health status should be minimized, it is concerned that instituting such a policy would lead to dramatic premium increases in certain communities or employer groups. Because it is difficult to disentangle the effect of the various factors described above, such a policy should be phased in over a fairly long period to prevent communities that have effectively reduced health costs from being penalized. Ultimately, the variation in premiums should be fairly similar to variation in local price levels. The Commission recommends that CRAs respect metropolitan areas, so that natural markets are not divided, regardless of state boundaries.

Relationship to Purchasing Group Areas

Purchasing group areas, such as those served by health alliances or health insurance purchasing groups, are promoted by their supporters as tools for organizing the demand side

of the insurance market; overseeing administrative functions required by a reformed health system; and enforcing, if necessary, cost-control measures (see Chapter 6).

In general, discussion of purchasing group areas has implied that they will also serve as community rating areas. It may be the case, however, that the different needs of the two constructs lead to different criteria for creating boundaries and that administrative strategies can be developed to enable purchasing groups to oversee a system based on community rating areas that are different from purchasing areas. For example, analysis of community rating areas may suggest that, at least in some states, substate community rating areas may be appropriate even if there are no compelling reasons to create substate purchasing groups. In this case, a statewide purchasing group could be developed that administers a system composed of several premium areas. Conversely, it may be appropriate from a community rating perspective to create across-state areas (for sparsely populated states or border-crossing metropolitan areas) that require payments across different purchasing groups. Once there is consensus on which principles should guide the development of community rating areas, it should be easier to establish a framework for constructing purchasing group areas, if they are created under system reform.

Boundary Concerns

Whether creating purchasing group areas or community rating areas, there are clear reasons to avoid creating boundaries in populous areas. Purchasing group boundaries would not inherently disrupt care patterns as long as plans could contract with purchasing groups in adjacent areas. The continuity of provider-patient relationships would be maximized, however, if boundaries were established in sparsely populated areas. Any disruptions are more likely to be caused by premium differences, which would be driven by community rating area design.

Large premium differences at the borders of either community rating or purchasing group areas will affect location decisions by consumers and plans. As discussed above, it is important to understand the sources of such differences to determine whether they would enhance or reduce cost containment and efficiency of the health care system. To the degree that premium variation is caused by differences in local price levels and provider efficiency, for example, the incentives for consumers and plans should distribute consumers to less costly areas. This is consistent with the goal of reducing health outlays. But if premium differences were attributable to differences in the health status of different communities, there would be no systemwide benefit from the resulting location incentives.

Because premiums affect cash wages in systems requiring employer premium contributions, firms are likely to react to differences in premiums across boundaries. Businesses, which are clearly influenced by local tax rate differences when making location decisions, face a peculiar situation with regard to analyzing location and hiring incentives included in some proposals. For example, the Administration's proposal ties employers' premium contributions

to employees' residence. In this case, firms may analyze expected labor flows in boundary areas, and might develop specific hiring policies that target workers residing in lower-premium areas. In addition, when deciding where to locate, firms committed to remaining in higher-premium areas (for market or tax reasons) may have incentives to migrate to parts of the area adjacent to lower-premium communities. By contrast, those in lower-premium communities might opt for locations farther from boundaries with higher-premium neighbors.

In any case, employers are likely to incorporate premium differences in their assessment of labor costs in different markets. Although local labor costs currently vary across markets for a variety of reasons, an employee-specific difference in total compensation linked to where a worker lives is uncommon. Workers typically bear costs like local taxes or commuting associated with where they choose to live. Even if they want higher wages to compensate for the local taxes or commuting expenses associated with a particular job, workers—rather than their employer—usually absorb these costs. If there is a large premium difference at an area border, labor market dislocations caused by system reform will be exacerbated by a policy that ties employer contributions to employee place of residence. The problems created by premium differences in adjacent areas could be minimized using various approaches. One would be to ensure that premium differentials at boundaries vary within a limited band. Another would be to devise a method whereby employers are accountable for premium payments based on place of employment. Under this option, employees would bear premium differences associated with residence decisions, as they do now with local taxes.

Despite the many reasons that suggest purchasing group area and community rating area boundaries should not fall in populous areas, they will do so if state boundaries must be respected. Many large metropolitan areas, as well as some moderate-sized cities, that cross state boundaries may be vulnerable to creation of unnatural premium areas and purchasing group areas. Again, decoupling the CRA and purchasing group design issues may help resolve this issue. The Commission has concluded that interstate CRAs could reduce the incidence of premium differences within border-crossing metropolitan areas while intrastate purchasing groups, if necessary and appropriate, could respect state boundaries.

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CHAPTER 8

RISK ADJUSTMENT

Risk adjustment is necessary to deter plans from selecting or marketing to healthier enrollees, to protect plans from being selected by a costlier-than-average group of enrollees, and even to facilitate plans' attempts to specialize in treating people with certain illnesses or conditions. In its *Annual Report to Congress 1993*, the Commission recommended federal support for development of improved risk measurement, with a particular emphasis on demographic factors and self-reported health status (PPRC 1993). As health system reform moves forward on the congressional agenda, many are concerned that the inadequacy of current techniques for dealing with risk adjustment may prove one of the more difficult barriers to overcome in designing an approach that will work.

The necessity for risk adjustment is closely tied to the role of community rating. As the Commission recommended in Chapter 7, premiums paid by consumers should be community rated for defined classes that apply to all health plans. These classes would appropriately include type of coverage (individual or family) but should not include categories such as health status, race, or sex. Whenever health plans are not permitted to differentiate premiums for a particular class, they are at risk for drawing enrollees disproportionately from one particular category of that class of people. As a result, community rating increases the need for risk adjusters that modify payments to health plans to reflect the relative risks of those they enroll.

The need for effective risk adjustment occurs wherever there is a choice of health plans. Most reform proposals call for the development and implementation of systems for risk adjustment or reinsurance, but they generally do not prescribe in any detail the design of those systems. The Commission's recommendations go a step further by outlining how such systems might be designed.

RECOMMENDATIONS

Prospective risk adjusters that predict differences in utilization should be built into the system for compensating plans. The methods used should be fully disclosed to all plans. The system should start with those risk adjusters such as age and sex for which data are most readily available. Additional risk adjusters are needed and should be incorporated as better data become available and research shows them to be effective. These could include health status, eligibility for premium subsidies, and institutional status. Risk adjusters should be implemented in a way that protects privacy.

A system of risk sharing, such as a prospective reinsurance pool, retrospective stop-loss reinsurance, or partial capitation, should supplement the use of risk adjusters in order to ensure that plans are not unduly rewarded or penalized for biased selection. Efforts should be made to collect data on high-cost individuals through this system to develop improved prospective risk adjusters.

A process should be put in place for evaluating the impact of the risk-adjustment system on health plans and enrollees and for making timely refinements. The federal government should support research and development of improved risk adjusters and systems for risk sharing. States should be encouraged, with federal approval, to adopt local modifications and to try different risk-adjustment systems on a demonstration basis, with the results used to support refinements in the system used nationwide.

This chapter begins with a general statement on the need for risk adjustment, including a consideration of how elements of reform might reduce the need for risk adjustment. It then turns to an assessment of the state of the art in risk adjustment. This assessment includes a discussion of the explanatory power of various risk adjusters in predicting variation in individuals' or groups' health costs. It also reviews several experiments that are under way in the area of risk adjustment. The final part of the chapter looks at options for incorporating risk adjustment or risk sharing under health system reform. This section outlines specific options for risk adjustment and risk sharing. They include both traditional risk adjusters for demographic factors and health status and several alternatives for reinsurance or partial capitation.

THE NEED FOR RISK ADJUSTMENT

Risk selection, or biased selection, refers to any situation where health plans differ in the health risk associated with their enrolled groups, that is, where one group's expected health costs differ from the expected costs of another group. Risk selection can occur when plans seek to avoid high-risk individuals or groups. This behavior is widespread according to anecdotal evidence, although it is difficult to measure. Risk selection also occurs whenever individuals or groups segment themselves by risk through the way they select plans. Evidence that risk selection occurs, regardless of whether it is instigated by plans, is substantial for both privately and publicly sponsored insurance markets.

The importance of risk selection is that plans with better risks may increase market share through charging lower community rates than their competitors or may have the opportunity to become more profitable. Plans may also be deterred from specializing in treating high-cost illnesses or conditions if they are not compensated for the resulting adverse selection.

Various steps can be taken to reduce the likelihood of risk selection or to compensate health plans for any selection that occurs. Selection can be reduced through a variety of regulatory measures. Guaranteed issue and renewability of policies, a standard benefit package, open seasons for enrollment, and minimum plan standards would restructure the market in a way that might reduce opportunities for risk selection. These rules have been included under a wide variety of health system reform proposals (see Chapter 6). General consensus seems to exist on the value of these measures for structuring a fairer, more competitive insurance market. Less consensus exists on how effective these measures will be in reducing the need for risk adjustment.

There is also less agreement on what restrictions should be imposed on plans' marketing activities in a restructured market. Anecdotal evidence abounds on the use of marketing to avoid bad risks, although research has not found systematic evidence. The Commission supports the idea that the government should follow the current practice of some large plan sponsors by banning various targeted marketing practices that could easily be used for purposes of risk selection and by requiring prior approval for plans' marketing materials (see Chapter 6).

It is impossible to tell how much biased selection might remain after these structural changes are implemented, in part because these rules are currently in effect in few markets. It is clear that reforms such as a standard benefit package would tend to reduce biased selection. Other aspects of health system reform, however, might increase it. There is considerable concern that shifting choice from employment-based groups to individuals could increase the potential for selection bias initiated by the consumer. Individuals would be able to choose any plan offered, compared with the current situation where employers may limit the choices their employees have. In addition, stronger competitive pressures and premium limits would increase the incentives for plans to segment risk in order to stay profitable.

Where risk selection occurs in spite of these reforms, a system of risk adjustment or risk sharing can help to offset the financial impact on plans. Purely prospective risk adjusters are set at the start of the enrollment year and do not rely on actual service use during the year. These include age, sex, health status, and measures of prior use of health services. Risk-sharing mechanisms, variously referred to as reinsurance or partial capitation, differ in that they generally take into account on a current or retrospective basis the actual use of services (in some models, only for high-cost cases). It should be noted that the line between risk adjustment and risk sharing is less distinct in practice than implied by these definitions.

The Commission generally agrees with the judgment reached by the risk-adjustment work group of the American Academy of Actuaries (1993) that "no one risk assessment approach has been sufficiently tested in regard to accuracy, administrative efficiency, implementation issues, or expense to warrant its recommendation at this time as the best long-term approach." Yet the Commission also agrees with that group that risk-adjustment mechanisms are

necessary and that a workable solution can be found that will mitigate at least some of the worst effects of risk selection.

Risk adjusters are not widely used, and yet most multiple-choice markets function reasonably well. For example, the Federal Employees Health Benefits Program (FEHBP), which uses neither a standard benefit package nor risk adjusters for age and sex, is subject to biased selection but continues to offer a wide choice of plans to federal workers. Existing arrangements find various ways to operate without risk adjusting the contributions to insurers. In some, plans with favorable selection may profit compared to similarly priced competitors with adverse selection. In others (e.g., the Health Insurance Plan of California, called the California HIPC), the "risk adjustment" is passed on to the consumer in the form of an age-rated premium. In other situations (e.g., high-option plans in the FEHBP), the "risk adjustment" for enrollee differences in average risk is passed on to the consumer as higher or lower premiums beyond those justified by benefit differences.

One program that has apparently been harmed by the lack of good risk adjusters is Medicare, which lacks a structured process for enrollment in managed-care plans. According to a recent study, Medicare health maintenance organizations (HMOs) disproportionately enrolled healthy beneficiaries. Although the program includes risk adjusters in its payment scheme, they did not adequately protect Medicare from this biased selection (Hill and Brown 1990). For the most part, Medicare HMOs determine when and how potential enrollees learn about their existence. Even if plans make no special effort to avoid high-risk people, the combination of an unstructured system and enrollees' preferences appears to make it more likely that healthier enrollees will learn about and enroll in these plans. Plans, however, must pass on to beneficiaries any excess revenues they accrue because of selection. The result has been higher costs to the federal government as well as the unwillingness of some plans to participate.

The establishment of basic rules of competition will make multiple-choice markets, such as Medicare's, function better. In addition, the use of simple risk adjusters such as age and sex may help with some of the more obvious inequities, although the research literature tells us little about how much money might be transferred among plans with these simple risk adjusters.

THE STATE OF THE ART IN RISK ADJUSTMENT

Researchers have established the fact that risk selection occurs and have developed various methods for making adjustments in payments. Much of this literature, however, looks at the theoretical ability of risk adjusters to predict individual variations in health costs. Because few public or private payers have risk-adjustment systems in place, there is little experience from which to judge how well these systems operate in reality.

The Research Literature on Risk Adjustment

There is scant evidence on the ability of risk adjusters to capture variation in plans' costs; as a result, the impact of uncaptured selection on costs and potential profits remains generally unknown. In particular, existing research has provided almost no information on how well risk-adjustment formulas capture the actual self selection that occurs in markets with multiple insurance options. Nor can existing research possibly answer these questions for an environment where the rules for plan selection have been substantially changed.

The research literature shows that prospective risk adjusters explain little of the variation in individuals' health care costs. Age and sex alone capture between 1 percent and 2 percent of cost variation (Lubitz et al. 1985; Newhouse et al. 1989). Addition of simple health status measures would raise this to between 4.5 percent and 6 percent (Newhouse et al. 1989; Hornbrook and Goodman 1993). Measures of prior health care use or specific disease conditions can account for between 5 percent and 7 percent of cost variation (Ash et al. 1989; Thomas and Lichtenstein 1986). When a number of different predictors are combined, between 9 percent and 13 percent of cost variation is explained (Newhouse et al. 1989; Schauffler et al. 1992).

In several respects, however, the low explanatory power reported in the literature provides little information about the actual performance of risk adjustment. On the one hand, much cost variation across individuals is absolutely unpredictable in the sense that no one can tell exactly which individuals will suffer heart attacks or be diagnosed with cancer.[1] Health plans, even with extensive clinical information in their data systems, cannot predict this type of variation any more than a set of risk adjusters can. Researchers have estimated that even a perfect formula would explain just a small portion of variation in individuals' costs, perhaps 14.5 percent (Newhouse et al. 1989) to 20 percent (Welch 1985).[2]

On the other hand, Newhouse (1994) makes a case that even a fairly good risk-adjustment formula leaves significant financial incentives for "cream skimming," or selecting the healthiest people, within the limits of the predictable variation. He illustrates with a hypothetical case where no risk adjustment is used and where a plan with perfect information avoids everyone on whom it expects to lose money (but where other plans are passive). In this case, 55 percent of the plan's revenue would be profit. If a risk-adjustment process could explain 70 percent of the explainable variance (better than existing methods), the plan would lose only about one-third of its profit. The plan thus retains a substantial incentive to practice risk selection. Many of the practices the plan might use, however, would be banned by requirements such as guaranteed issue, and finding ways to bypass these rules might be prohibitively expensive.

[1] In 1987, for example, more than 40 percent of health care expenditures were accounted for by just 2 percent of the population (Berk and Monheit 1992). These catastrophic cases are very difficult to predict by any means.

[2] Total predictable variation might be somewhat higher because these estimates ignore the potential for predicting changes in costs, for example, by accounting for pregnant women who have not yet delivered.

The research literature provides even less information about the probable impact of risk adjustment on plans. Most of the literature has focused on explaining variation in individuals' costs. This is sensible when the key issues are either the incentives and ability of plans to select particular enrollees or access to care by individuals with high expected health care costs (Newhouse et al. 1989). On the other hand, a risk-adjustment formula could also be judged by its ability to explain variation in plans' costs. This perspective considers the formula's ability to reimburse plans for adverse risk selection they incur, and ultimately the effects of risk adjustment on plan profitability.

Some recent research has moved toward an analysis of health plans by looking at groups of individuals drawn from the data by the researcher. Analysis of groups of randomly chosen individuals demonstrates the law of large numbers: It is easier to predict average health costs for the group than for an individual, with predictability increasing as group size grows (Hayes 1991; Robinson et al. 1991). Other researchers have constructed groups based on specific diagnoses and procedures, such as cancer or heart conditions, and have evaluated the ability of different risk adjusters to predict expenditures for these groups (Anderson et al. 1990).

Research on actual self-selected groups of HMO enrollees demonstrates how difficult it is to estimate the true impact of risk adjustment on plans. HMOs typically do not provide enrollee-level cost data. Consequently, studies of selection and HMOs are usually limited to examining either a prediction of HMO costs (Robinson et al. 1991) or historical fee-for-service costs of recent HMO enrollees (Hill and Brown 1990). These studies can show that HMOs are predicted to have favorable selection and hence lower costs, but without actual HMO cost data, there is no way to see how close these predictions come to actual costs.[3]

This gap in the literature regarding risk adjustment and plan costs indicates a fundamental difficulty. Even if HMO cost data were available, they would reflect not only biased selection but also hard-to-measure factors such as moral hazard, depth of benefits, and efficiency of operations. Any mismatch between the prediction of a risk-adjustment formula (or payments) and actual plan costs could be due either to a poorly performing formula or to any of the other factors affecting costs. In practice, it may be quite difficult to judge directly how well the adjustment formula is working even after risk adjustment is implemented.[4]

The limited evidence for the effectiveness of risk-adjustment methods in the literature does not mean that risk adjustment should not be attempted. To the contrary, any reasonable

[3] The Commission has funded a study, described at the end of the chapter, to look at the ability of certain risk adjusters to predict utilization differences between self-selected groups.

[4] Price and Mays (1985) demonstrate a rare occasion where differences in costs across plans could be attributed to risk selection alone. They compared the Blue Cross Blue Shield high-option and standard-option plans offered under the FEHBP, two nearly identical fee-for-service plans with only modest differences in benefits. After adjustment for differences in benefits, the large remaining difference in premiums was attributable to selection. This type of selection, however, would be effectively precluded under rules that require a standard benefit package.

method for risk adjustment or risk sharing that maintains incentives for efficient practice will probably improve the functioning of the market relative to one without it.

Experiments in Risk Adjustment

Risk adjustment is used today in few situations. Most employers, including the federal government, lack the data or the methods to apply risk adjusters even if they wanted to do so. Instead, they accept the fact that risk selection may put some plans at a competitive advantage. There is, however, a recognition that increased use of community rating would raise the stakes for risk adjustment. Several experiments are under way in risk adjustment. One of the most comprehensive is in the state of New York. Several other states are trying different approaches. There is also work going on in the private sector, including a foundation-sponsored project with the Bay Area Business Group on Health in the San Francisco area. Finally, both Germany and Holland are looking at ways to compensate for biased selection.

New York State's Community Rating Law. New York State, recognizing the link between community rating and risk adjustment, created two types of risk-sharing pools under the community rating law it implemented starting on April 1, 1993 (New York Department of Insurance 1992). One transfers money among health plans—in effect, adjusting premiums—for each plan's small-group and individual lines of business based on the age-sex distribution of its enrollees. This pool operates much like a typical risk-adjustment mechanism, although it is limited in scope to two demographic factors.[5] The risk adjusters are conventional, but the system breaks new ground in creating a means to make transfers among plans. The second pool transfers money among plans based on their having enrollees with specified high-cost medical conditions. This pool is designed so that all insurers share a portion of the cost of treating these conditions.

The demographic mechanism includes a pool for the combined individual and small-group markets in each of seven broad geographic regions; insurers' large-group business is not incorporated into the pools.[6] A table of age, sex, and family status factors was established in the regulation. A calculation is made for each insurer to determine the demographic mix of its enrollees; from that calculation, the insurer either pays into the pool or receives a payment from the pool, depending on how its demographic mix differs from the regional average. Insurers are expected to adjust their premiums to account for these pool payments.

The specified medical-condition pool also operates separately for each geographic region. Carriers pay a flat quarterly amount for each covered individual ($5 in 1993) and family ($10

[5] It differs from a structure like an alliance where all premium dollars pass through a single entity. A pool is created where dollars come in through assessments and are paid out based on the risk factors.

[6] A separate pool is created in each region for the medigap insurance market.

in 1993) into the pool. Carriers then collect a fixed payment from the pool if an enrollee is diagnosed with one of the applicable conditions. Lump-sum payments are made in the case of liver, heart, pancreas, pulmonary, or bone marrow transplantation (each as treatment for specified medical conditions), or for neonates with birthweight of less than 1,500 grams who require intensive care for more than 30 days. Dollar amounts are specified in the regulation for each of these conditions, although payments cannot exceed actual incurred expenses. Monthly payments are made for those diagnosed with the human immunodeficiency virus (HIV), where the white blood cell count is below 50 on two consecutive tests, or with ventilator dependency as a result of amyotrophic lateral sclerosis, severe trauma, or severe muscular dystrophy; again, fixed dollar amounts are specified. The dollar amounts were set at about 50 percent of the expected average cost of treatment to preserve incentives to contain costs.

The pools have been in operation for one year.[7] The biggest implementation problem in the first year was estimating the initial average demographic factor for a region. In two regions, preliminary estimates (based on about 40 percent of the data) were off by a significant amount. When complete data became available, the errors meant that the losers owed more than expected and the winners received less than expected.

In the medical-condition pool, it is too early to judge the results. The potential dollar transfer, with the current list of conditions, appears to be no more than 1 percent of total premium dollars. Few claims have been submitted thus far, probably because insurers are still trying to understand the rules; the pools have not yet made their first payouts. Some have argued that the payments for HIV are set too low, and this is being studied. Other conditions might be added in the future, but the state wants the pools to gain more experience before making such changes.[8] The American Academy of Actuaries has initiated a project to study the New York experience as data become available (Rosenblatt 1993).

Other States. In general, most states have not undertaken extensive experiments in risk adjustment. Several states, including Iowa, Minnesota, and Washington, have initiated the development of risk-adjustment systems. As part of implementing its own system of managed competition, Minnesota expects to start risk adjustment in 1995. In the first year, the system will include patient demographics, combined with self-reported health status based on the SF-36, a 36-item, multiscale questionnaire developed by RAND. In addition, a mandatory reinsurance pool would be used to pay for catastrophic cases; plans would retain some portion of the risk above a threshold (Minnesota Department of Health 1993).

The California HIPC, a new entity created by the state that makes about 18 health plans available to employees working for small firms, does not use any risk-adjustment mechanism.

[7] Lawsuits—thus far unsuccessful—have challenged the regulation for exceeding the bounds of legislative authority and for violating the terms of the Employee Retirement Income Security Act of 1974 (NHPF 1994).

[8] The state expects to add new conditions only if a majority of health plans within two of the three groups of carriers (HMOs, commercial insurers, and Blue Cross Blue Shield plans) agree.

Instead, it varies the premiums consumers pay by age and sex. It is, however, working with its participating plans on developing an approach. They are seeking to reach agreement among the plans on how to assess risk prospectively and the appropriate thresholds for bad selection—in other words, how much uneven selection must occur before any type of risk adjustment must be implemented. This process is under way, and they hope for results in 1994.

Several states have adopted reinsurance pools as part of insurance reform legislation for the small-group market. Connecticut, for example, set up a reinsurance pool in 1990 in which all insurers are automatically members. Insurers can reinsure either individuals or groups through the pool but retain the first $5,000 of claims as their direct responsibility. Pool expenses are financed in part by premiums paid by the plans to cover these individuals or groups. But, in order to spread the costs of drawing these higher risks, the pool also assesses all small-group insurers. The additional assessment makes this mechanism work in the sense that a plan is not paying for the full expected costs of its own, presumably riskier, enrollees (NHPF 1991; 1992).

German and Dutch Proposals for Risk Adjustment. In 1992, Germany enacted legislation to expand individuals' freedom to choose the sickness fund from which they obtain insurance coverage and to create a system of risk compensation. For 90 percent of the German population, health services are financed through a system of statutory sickness funds, which are similar to health insurers. The risk-compensation system, which is being implemented in 1994, will make adjustments in payments to sickness funds based on age, sex, and disability status (Files and Murray 1993).[9]

With about 40 percent of its citizens covered by private insurance, the Dutch government saw that adverse selection was creating a need for a system of risk adjustment.[10] For several years, the Dutch had a system that used adjusters for age, sex, and region, and later tried to add adjusters for disability status, prior health costs, and mortality. The need for risk adjustment was, however, lessened by the fact that many who are chronically ill, disabled, or mentally handicapped are in a separate government program. Nevertheless, the Dutch government concluded that the system was both too complex and too difficult to administer and recently suspended it until 1996. Proposals have been made to reform the risk-adjustment system through a central pool, but no action is expected before 1994 elections.

One intriguing idea that has been put forth for the Dutch system is to allow insurers freedom to use risk factors in setting premiums, but require them to make explicit which risk factors they are using. This latter step, it is argued, would reduce the information asymmetry between the government and the insurers. The risk factors identified this way could be built

[9] The German system also addresses the contribution side, making adjustments for those sickness funds whose members have lower incomes. These adjustments are conceptually separate from the risk adjustments.

[10] Holland is the only nation in Europe where private insurance covers more than 10 percent of the population.

into the risk-adjustment system in subsequent years and used to reduce the potential for cream skimming (Van de Ven and Van Vliet 1992).

INCORPORATING RISK ADJUSTMENT AND RISK SHARING IN HEALTH SYSTEM REFORM

In systems where risk rating—premiums differentiated by factors such as age or health status—is permitted, risk adjustment is less necessary because plans can charge higher costs to those enrollees expected to use more services. But as soon as any degree of community rating is established, the higher costs for plans subject to biased selection must either be assessed across the board to all enrollees or cause financial losses for the plan. Risk adjustment is aimed at transferring money among plans so that they are treated more equitably.

Some experts are highly concerned that inadequate risk adjustment could be the Achilles' heel of health system reform, preventing the emergence of effective market competition. Nevertheless, others—including some insurers who typically enroll riskier people—have argued that the inadequacies of risk adjustment should not stop the progress of reform.[11] Any effective risk adjusters could reduce the extent to which the cost of adverse selection is passed to the consumer in higher premiums or kept by plans in reduced profitability (or vice versa for the rewards of favorable selection). Whether the use of risk adjusters reduces these costs to a tolerable level remains difficult to measure. Both those optimistic about the feasibility of developing good risk adjusters and those who are more skeptical would probably agree that all effective risk adjusters should be built into the system for compensating plans.

There are at least three potential criteria for an effective risk adjuster. First, it should be able to predict differences in costs or utilization for groups and avoid systematic understatement or overstatement of the associated risk.[12] Second, a risk adjuster should be designed to minimize the ability of health plans or providers to influence measurements by the way care is delivered or the way episodes of care are recorded. Third, a risk adjuster should not be unduly complex or expensive to administer and, if possible, should be based on existing data systems. Although the research literature generally addresses the first, it provides little assessment of the other two (American Academy of Actuaries 1993; Haugh 1993; Rosenblatt 1993).

[11] In his written statement to a hearing of the Ways and Means Committee, a representative of the Blue Cross Blue Shield Association stated that "in the short run, reform can proceed even if we cannot correct completely for differences in risk among health plans" (Bachofer 1993). A representative of the Health Insurance Association of America stated at the same hearing his agreement with "much of what has been proposed for health risk adjusters," while arguing that the approaches would work better under a model of employer choice, not individual choice (Bykerk 1993).

[12] Newhouse (1994) makes a strong case for using a criterion of ability to predict differences in individual utilization, given that enrollment would occur on an individual basis under many reform scenarios.

The difficult question is how to operationalize the first criterion. It should be relatively easy to ensure that the risk adjuster at least moves payments in the right direction. For example, a plan enrolling people who are expected to be more costly because they are older or are diagnosed with HIV or diabetes would have its payment adjusted upward. It will be more difficult to set the magnitude of the adjustment to account for how much costlier these enrollees are expected to be. If the level is set too low, then plans may still seek to avoid such people; if too high, plans may prefer enrolling older or sicker enrollees rather than avoiding them. A further question is how precisely defined the categories need to be. If people 30 to 50 years old are grouped, then plans lose if more of their enrollees are, say, 45 to 50. If all those diagnosed with HIV are grouped, then plans lose if they enroll the sickest HIV patients needing the most care.[13]

The Commission's recommendations reflect a conclusion that risk adjusters are needed and that the system should include at least adjusters for age and sex. Other risk adjusters are certainly required as part of the system and should be added as they are shown to meet the criteria. The Commission also calls for adoption of a risk-sharing system. It is important to note that legislation need not, and probably should not, include the details of how risk adjusters or a risk-sharing system would work. The goal here is to outline how they might work in order to help establish their credibility.

The Mechanics of Risk Adjustment

A general issue is how a risk-adjustment system would be implemented (Bowen and Slavin 1991; Haugh 1993; Kaiser Foundation Health Plan 1994). One approach, as in the Administration's proposal, is that plans would bid on an average enrollee in the community and would receive a risk-adjusted payment depending on the mix of enrollees they draw. This system could be implemented through an alliance that controls the flow of dollars or through a separate pool, as in New York. A second approach lets each plan propose a premium based on its own historical enrollment mix. Premiums quoted to the consumer would be adjusted to reflect projected risk selection. This approach is now used by those employers that make risk adjustments since they lack the leverage to influence plan premiums directly.

There are a variety of technical reasons that favor one or the other of these approaches, although they would be equivalent if the risk adjusters were perfect. Both, however, share the assumption that differential premiums based on the factors selected as risk adjusters should not be paid by the consumer. The first method tends to put the cost of errors on payments to plans. If adjusters are inadequate, adversely selected plans will be undercompensated if they in fact bid on the average enrollee. The second method tends

[13] A concern raised by some experts is that the incentive to enroll the healthiest HIV patient or the youngest in an age bracket would be more damaging than if the adjusters were not used. Although this argument is unproven, it suggests that a risk adjuster should be based on categories that are as homogeneous as possible.

to ensure that plans are protected from errors by determining what payments they receive, although they risk being overpriced in the market if they are adversely selected. The second method also requires projecting risk measures in advance of the enrollment period.

A second technical issue is created by variations in the treatment of seemingly similar patients (Newhouse 1994). The weights assigned to risk adjusters will depend on whether they are calculated with data from fee-for-service plans or managed-care plans or whether different geographic areas are considered. These decisions would be easier if agreement existed on which treatment style is desired, but this information is often unknown.

A third issue is the appropriate level on which risk adjustment should be implemented. One possibility is to implement risk adjustment at the level of the community rating area, regional alliance, or purchasing cooperative. There is a strong logic for using the same boundaries for community rating and risk adjustment, although several community rating areas could be combined into a larger risk-adjustment pool (see Chapter 7). This issue becomes more difficult if competing purchasing groups are allowed. One option would be to create risk-adjustment pools at the level of the community but not inside the purchasing group itself. This would permit risk adjustment across different purchasing groups.

Finally, the Commission believes that there should be full disclosure of the methods used to plans. Plans need this information so that they can project the income they will receive for a given premium bid.

Demographic Adjusters

Information on enrollees' age and sex generally forms the backbone of most risk-adjustment models. These variables are typically maintained as part of each plan's enrollment file, and actuaries have standard rating factors that could be applied. Although rating factors vary somewhat across the industry, these differences could be addressed.[14]

The advantage of using demographic adjusters is that they are relatively easy and inexpensive to implement, are not subject to gaming, and can provide some balancing of the demands made on plans by risk selection. Plans that attract older people will receive some compensation from plans attracting younger enrollees and can set lower premiums as a result. The question remains whether transfer payments using demographic adjusters make a significant difference in compensating plans for biased selection. Although age and sex

[14] A technical issue involves the premium base on which to calculate the risk adjustment. To ensure that the system is budget-neutral for the pool and for all plans, a reserve pool funded by plan assessments might be needed (Haugh 1993; Kaiser Foundation Health Plan 1994).

explain no more than 2 percent of the variance in individual spending, they could be more powerful in predicting group differences (Hayes 1991).

While age and sex are appropriate starting points, other demographic factors might be considered. A risk adjuster based on eligibility for low-income premium subsidies might serve as a proxy for risk in order to compensate plans for the presumed higher cost of treating low-income enrollees. Data would be available on eligibility, as opposed to other measures of income, and they should not be easily subject to gaming. Although calibration of this adjuster might be difficult, it could be improved over time. Institutional status, used in the Medicare payment formula, would be another important risk adjuster, although its predictive power may be limited. Geographic area of residence (e.g., residence in a medically underserved area) could also serve as a proxy for risk, on the assumption that morbidity is higher in certain areas. It would at best be a crude measure and might be used only if measures of health status were ineffective.

Health Status Adjusters

Another category of potential risk adjusters includes those that measure medical conditions or health status. Among these are self-reported health status, reports on the presence of chronic conditions, or claims-based measures of prior service use. The advantage of health status adjusters is that they are likely to provide at least some compensation to plans that are subject to adverse selection. The Commission believes that health status is likely to play a major role in risk adjustment, once better data become available and research proves which measures might be used most effectively.

The use of health status raises some concerns about privacy and confidentiality. Most information used for risk adjustment probably does not need to remain individually identifiable. More generally, however, any information used for this purpose should be subject to the same protection as any other health data (see Chapter 16).

Self-Reported Health Status. Self-reported health status measures can be as simple as an individual's assessment of health status relative to peers or as complex as the SF-36 questionnaire. In either case, data consist of individuals' subjective ratings of health rather than objective measures of functional or physiological status.

It is this area where research is most limiting, providing little basis for even calibrating potential adjusters. Studies have shown only modest success in the ability of simple health status measures to predict differences in individual utilization (Newhouse et al. 1989). Self-reported health status, measured by the SF-36, has been shown to be a better predictor of group health costs than demographic measures alone (Hornbrook and Goodman 1993). But outside of that one study, health status measures remain mostly untested in actual risk-adjustment systems.

In addition, data availability is a major problem. Current data systems do not include measures of health status or indicators of medical conditions.[15] Self-reported health status could be gathered in a variety of ways. First, individuals could be required to report their health status as they enrolled in plans, making health status an additional variable in administrative files. In many cases, however, data for children and spouses would reflect the opinion of the individual filling in the form.

Second, these data could be gathered through a survey, either for all individuals or for a sufficiently large sample of individuals in each plan.[16] Luft (1986) and others have argued that risk-weighted enrollment in a plan need not be derived by adding up objective risk factors for every enrollee. Risk factors could be derived from health status indexes based on samples of enrollees. In addition, if enrollments are relatively stable (as has been true historically), risk factors could be updated with surveys of those who switch plans. This approach would be costly, however, and nonresponse would make the calculation of rates more difficult.

Issues of gaming would need to be addressed if self-reported health status were incorporated into the payment formula. The data are subjective and generally cannot be verified. Although each plan would have a financial incentive to encourage enrollees to report poor health, the individual enrollee acting alone would not have any incentive to misreport. In addition, the inclusion of health status in the payment formula could reduce payments for plans that successfully engage in health-improving activities, including traditional acute care services and preventive services such as smoking cessation, weight loss, and nutritional guidance. Although it seems implausible that such incentives would override the professional ethics of providers or the requirements imposed by quality performance reports, it may be an equity issue in that plans that successfully improved the health status of their enrollees would face financial penalties. Of course, these same plans might still save more in service costs than they would lose through the risk adjustment.

Indicators of Chronic Conditions. Others have proposed adjusters for the prevalence of chronic disease or for chronic disease risk factors. A recent study of Medicare HMOs found that differences in self-rated health status, activities of daily living, and a history of serious illness (cancer, heart disease, or stroke) accounted for 83 percent of the difference between the projected adjusted average per capita cost (AAPCC) payment and the projected fee-for-service costs of enrollees (Brown et al. 1993).[17] The history-of-illness factor alone accounted

[15] There are examples of expanding data availability. Kentucky's health department plans to begin surveying a sample of the state's population with the SF-36 health status questionnaire, and Minnesota intends to use it as well. In addition, the Bay Area Business Group on Health in San Francisco has conducted a broad survey of employees that included the SF-36 as part of a research project on risk adjustment.

[16] The Medicare Beneficiary Health Status Registry, where a mail survey is sent to a significant proportion of all new Medicare beneficiaries, is an example of this approach.

[17] Note that this study was unable to look at actual costs in the HMOs.

for nearly half of that explanation. Another study found that the inclusion of risk factors for chronic disease improved substantially the predictive accuracy of the AAPCC (Schauffler et al. 1992).

Measures of chronic illness could be gathered from surveys, functional measures such as activities of daily living, or medical records but could be difficult to administer and easy to manipulate. If medical records were used, data gaps could be a problem for people who do not use health services during the year, although any significant chronic condition probably should lead to at least one encounter each year. The absence of diagnosis codes on many medical records might also limit this approach, although use of these codes is increasing.

Prior-Use Measures. At the level of the individual, prior use of health services is one of the best predictors of future health care use. Several measures of prior use have been suggested in the literature, including those based on hospitalizations (Anderson et al. 1986; Ash et al. 1989) and those based on ambulatory care (Weiner et al. 1991).

There are clearly some drawbacks to the inclusion of prior-use measures as risk adjusters. Plans that succeed in reducing service use would face lower per capita payments in the future. In addition, these measures are based on claims data and would be missing for individuals who have not sought care as well as difficult to obtain from providers not routinely generating claims. Prior-use data could also be difficult to secure from some plans in the short term until better data systems are developed. Research continues on prior-use measures, and more refined measures might avoid some of these problems.

Structured Negotiation

Luft (1986) originally described structured negotiation for risk adjustment in the context of the private insurance market. There he envisioned an entity that acts like a general contractor, pooling employee and employer premium payments, and approaching HMOs and other insurers to help design an appropriate negotiating process to address biased selection. The role of such an entity would be to obtain for employers and employees the best allocation across health plans of the pool of contribution dollars. To do so, it would approach local plans and attempt to negotiate with them over the risk-adjustment factors. The basic premise is that risk adjustment is a zero-sum game where plans must figure out alternative ways of dividing a fixed pie. In effect, the burden of proof would be on the plans; the contractor/negotiator would serve as a facilitator and final arbiter of face-to-face negotiations among plans.

In the context of a reform that involved some type of purchasing group, that entity could act in the role of contractor/negotiator and seek a kind of "rough justice" that might work as follows. First, demographic and other proven adjusters would be applied. The remaining premium differences would be examined, and plans would be asked to identify factors that account for them. Thus, a plan that has a lower-than-average premium might argue that its utilization review program or its discounted network fee schedule accounts for a certain

amount of the difference. A plan with a higher-than-average premium would argue that its enrollees are expected to be sicker for certain reasons. If consensus is reached, then appropriate transfers could be made among plans where risk differences are the explaining factor. As Luft (1993) told the Ways and Means Committee, it is plausible that each plan might claim adverse selection in at least one area (e.g., disproportionate shares of HIV-positive individuals, children with cystic fibrosis, or premature babies in neonatal intensive care). In a zero-sum environment, Luft asserts that such a scenario might produce agreement on what conditions to include and on appropriate payment levels.

The Commission is not optimistic that negotiation can play a significant role in developing risk adjusters, although health plans might propose local variations on the national risk-adjustment method. This approach is highly dependent on the willingness of plans to cooperate and negotiate in good faith. A plan benefiting from risk selection might refuse to participate and block the negotiations. In addition, the largest plans might be most able to bring expertise to the table and create a negotiating advantage. Furthermore, some process for arbitration would probably be necessary for the system to work. If most plans saw greater risk in an imposed solution than in a negotiated one, they would have more incentive to negotiate in good faith.

Options for Risk Sharing

Given that perfect risk adjusters will probably never be available, the Commission believes that risk sharing would be important for mitigating some of the consequences of biased selection. Options would include

- prospective reinsurance pools, where plans designate in advance the individuals who they anticipate will be more costly than average and for whom they want to share expenses across an areawide pool;
- retrospective reinsurance, where plans get stop-loss coverage from an areawide pool for a portion of the costs of their most expensive cases based on actual claims experience;
- partial capitation, where plans are paid partly through the capitated premium and partly for the actual use of services; and
- a condition-specific reinsurance pool such as New York's.

The use of "reinsurance" in the context of risk sharing differs from its usual meaning for insurance. When used in the insurance industry, the term refers to protection purchased by insurers against high, unexpected, random risk. Insurers frequently reinsure to protect themselves—and would still be allowed to do so—just as individuals insure themselves against high, unexpected, random risk. Traditional reinsurance has nothing to do with

protecting plans against risk selection. In this report, reinsurance is used to refer to protection through a government pool against known, nonrandom, higher risk (Bovbjerg 1992; Haugh 1993; NHPF 1992; 1994).

In general, all types of risk sharing have the potential to help deal with risk selection. But all have costs. These costs include the need for data collection on the part of plans; the cost of administering the risk-sharing pools; and the potential dilution of incentives that plans have to manage care, especially for high-cost cases.

Prospective Reinsurance. Prospective reinsurance refers to an arrangement, like the Connecticut reinsurance pool described above, where health plans identify individuals or groups believed to be high risk and pay a premium to a public or private reinsurance pool. Claims incurred by the individuals or groups for whom reinsurance has been arranged are covered in whole or in part by the pool, which is financed by assessments on all health plans. The transaction itself is likely to be invisible in the sense that the individuals or groups themselves would not be aware of being in this pool. The reinsurance premium paid by the plan is not designed to cover the expected costs of these people; rather, part of the cost is covered by a uniform assessment on all plans in the area. This approach was recommended in 1991 by the National Association of Insurance Commissioners as part of small-group insurance market reforms and is supported generally by the insurance industry. Over the past few years, a number of states have adopted these reinsurance pools for the small-group market.

An advantage of this approach is that it is prospective and can be designed to retain incentives for cost containment. The major disadvantage to this approach is that it continues to require that plans retain a mechanism for medical underwriting, so that they can determine where they need reinsurance. It rewards plans that are better able to identify their high-risk enrollees, but it reduces the rewards for doing so.

Retrospective Reinsurance. Retrospective reinsurance refers to arrangements where any claims paid by the insurer above a predefined dollar level (e.g., $100,000) are covered in whole or in part by the reinsurance pool. Such a pool would be financed by a uniform assessment against all insurers covered by the pool, thus spreading the risk of high-cost cases. This type of stop-loss coverage is closer to the pure reinsurance model that protects insurers against random high costs. The principal advantage of this approach is that it can be implemented easily and quickly and that it tends to spread the costs of high-cost cases broadly across all plans. By equalizing risk, it reduces but does not eliminate the incentive for plans to engage in cream skimming. By creating a threshold, plans would still have large losses just below the cap.

This option's main disadvantage is that it reduces plans' economic incentives to manage their high-cost cases effectively. It would also be relatively difficult to implement this type of reinsurance outside a claims-based environment, since the definitions of claims costs may not

be consistent between HMOs and fee-for-service plans. An additional disadvantage is that it may be difficult to find a suitable dollar threshold that protects plans from risk while maintaining an incentive to manage care. It would be important that reinsurance cover only a portion of actual costs so that plans retain an incentive to be efficient and to prevent the occurrence of high-cost cases where possible.

Partial Capitation. Newhouse (1986; 1994) has described a method that would pay plans on a partially capitated basis and would include actual use of services as a factor in the risk-adjustment process. He first proposed this approach as a modification of the way Medicare pays managed-care plans. Medicare would pay a capitation amount of, say, 60 percent (in contrast to the 95 percent used in the AAPCC). Second, on a periodic basis, the plan would be reimbursed for, say, 40 percent of the cost of actual services delivered.[18] For a person using no services, the plan would receive only the capitation amount; for a catastrophic case, the plan would be reimbursed the capitation amount plus 40 percent of their incurred expenses. In this way, the plan profits less from enrolling healthy people than under pure capitation or is penalized less for a higher risk profile. It thus attempts to balance the incentives that plans have to prescribe too few or too many services.

One issue with this approach is determining what entity is at risk for the fee-for-service component. In the case of Medicare, the government would be at risk as the ultimate payer. In an alliance system, however, it would not be feasible to place an alliance at risk. An alliance could, however, set up a partial-capitation pool where the unallocated portion (40 percent) of premium dollars was pooled across plans and paid out as described above. If the pool needed to pay out more than it had on hand, it would need the authority to assess all plans an additional amount. This assessment creates a systemwide incentive against excessive increases in volume, much like the Medicare Volume Performance Standard addresses volume in physician payment.

This partial-capitation pool is actually equivalent to a reinsurance pool with a particular structure for premiums and payouts. Using the above example, plans would be assessed a premium of 40 percent of their revenue stream (in effect, returning that portion of their capitation payment to the reinsurance pool). They would be reimbursed actual incurred expenses with a $0 stop-loss threshold and 60 percent coinsurance (i.e., they would pay 60 cents toward every dollar of claims). By contrast, a typical reinsurance pool might assess a premium and reimburse plans for cases with a $100,000 stop-loss threshold and 75 percent coinsurance. The real question then for policymakers is not whether to use partial capitation or reinsurance, but how to set the reinsurance parameters. The key is that incentives are maintained to manage care efficiently, to avoid underserving riskier enrollees, and to avoid selecting people who would fall just below a threshold.

[18] The percentages for the two portions of the payment could be set at different levels to place more weight on the capitation or more on the reimbursement of actual costs. The weight on the capitated portion could be increased as risk adjusters improve. Reimbursement for the cost of services delivered should be based on standardized fee schedules.

Condition-Specific Reinsurance. A medical-condition pool might serve as an intermediate step between risk adjustment for health status and a reinsurance system. New York's specified medical-condition pool has been mentioned favorably in testimony by the American Academy of Actuaries as a possible approach to reinsurance (Rosenblatt 1993). Rather than a reinsurance system that covers part of any expenses over a dollar threshold, this approach would share risk only for specified medical conditions that are expensive to treat and could easily send a plan from profit to loss.

As described earlier, New York's pool blends elements of prospective risk adjustment with elements of risk sharing. For patients diagnosed with HIV disease, the health plan in effect receives a prospective risk adjustment (although the system adds a risk-sharing element by limiting payments to the level of incurred expenses for treatment of these conditions). For categories such as organ transplants, the system works more like reinsurance where payment is triggered retrospectively after the occurrence of the condition but where the payment amount is determined prospectively.

New York's pool contains certain features that are worth noting. First, payments are based on a clinically defined medical condition, not an outlier cost threshold. These conditions should make the eligibility for a pool payment relatively unambiguous and relatively difficult to manipulate, although concerns have been raised in New York about the criterion for defining HIV disease. Criteria might include conditions that are significantly high-cost, low in frequency, readily identifiable using conventional data, low in within-diagnosis variation, and relatively unambiguous about treatment protocols.

Second, payment levels are set so as to retain incentives to contain costs. This feature responds to the complaint about the tendency of reinsurance pools or outlier payments to remove incentives to control costs in cases where cost containment is probably most important. The ultimate tradeoff in a medical-condition pool, as with other risk-sharing options, is how to balance the need to protect plans from the cost of insuring high-risk people against the need to manage the costliness of treating such people.

An Evolving Process for Risk Adjustment and Risk Sharing

Regardless of whatever specific set of risk adjusters or mechanism for risk sharing is incorporated initially under health system reform, the mechanisms should evolve over time. It is thus important to have a method for evaluating the impact of the risk-adjustment system on both health plans and enrollees. Furthermore, a process for making timely refinements should be established.

It is hard to evaluate success or failure without standards for judging the system. Health plans may face financial troubles or failure because they are not being adequately compensated for adverse selection or because they have not achieved efficiencies in administration or medical practice. It might take a combination of objective data and subjective judgments to assess the

impact of the system. The entity charged with evaluating the system may need to collect financial information on plans, as well as data on health status and the occurrence of various medical conditions among plan enrollees. It may also need to examine survey responses by plan enrollees, especially those who switch plans, and to solicit feedback from the plans themselves.

Clearly, further research is needed to develop and evaluate potential risk adjusters and improved systems for risk sharing. In 1993, the Commission urged that federal support be directed to this effort. For at least a decade, the Health Care Financing Administration has supported research to refine the use of risk adjustment in Medicare.[19] More recently, it has funded projects that have considered risk adjusters in the context of health system reform.

The Commission in 1993 contracted with researchers at the Park Nicollet Medical Foundation and the Johns Hopkins University to investigate the use of health status measures based on the SF-36, measures of chronic illness, and ambulatory care groups, a claims-based measure of prior utilization. This study is considering not only the effectiveness of these measures as risk adjusters, but also their administrative feasibility. In particular, the researchers will test alternative models of risk adjustment, using these different measures on several self-selected groups. An interim report found moderate congruence between medical records and measures based on self-reported health conditions (Park Nicollet Medical Foundation 1994). That report also looked at potential bias resulting from nonresponse to the health status surveys and provided some preliminary analysis of costs and privacy issues associated with administrative feasibility. The project's final report will contribute to the Commission's analysis of risk adjustment for its next annual report.

Numerous privately funded research projects are also under way. The Robert Wood Johnson Foundation, for instance, has contracted with researchers at the University of Washington to develop risk-adjustment models for implementation in Washington State in 1996. As part of that research, the project will study demographic and utilization data for 230,000 state employees and dependents who participate in five different health plans. The foundation also funded a project in which the Bay Area Business Group on Health is looking at the use of risk adjustment by its employer members.

The results of these and other projects should be valuable to those charged with designing and implementing a risk-adjustment system. But these projects might also be the basis for allowing states (or alliances, if created under reform) to adopt modifications of the national risk-adjustment system on a demonstration basis. Thus, Minnesota or Washington might be encouraged to experiment with the feasibility of using the SF-36 questionnaire as a measure of health status.

[19] This work has made important contributions to the literature, but there has been insufficient motivation on the part of policymakers to implement any of the proposed changes. Under health system reform, circumstances may force decisions.

Private health plans might also be an important source of innovation. Even if a negotiation process is not suitable as a primary method for designing risk-adjustment mechanisms, health plans might be brought together in a particular state to suggest new ways to approach risk adjustment or risk sharing. If they were able to reach consensus, for example, on the need to compensate plans when certain medical conditions were encountered, then these conditions could be the basis for a condition-specific reinsurance pool.

In these ways health system reform could provide a means to accelerate research on effective risk adjustment. With nearly universal agreement that risk adjustment is a critical element for reform to succeed, the Commission believes it is vital to explore all avenues to developing better risk adjusters and risk-sharing methods.

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CHAPTER 9

ENSURING ACCESS TO CARE FOR THE POOR

One major purpose of health system reform is to improve access to health care for the poor, a group with a higher risk of disease and mortality (Pappas et al. 1993; Adler et al. 1993). The need for reform is pressing because the gap in health status between the rich and the poor appears to have widened recently (Pappas et al. 1993).[1]

Most approaches to health reform would substantially change the financing and delivery of medical care to the poor, both by increasing the number of persons with insurance and by changing the arrangements under which Medicaid beneficiaries now receive insurance. Although most reform proposals would attempt to improve access by expanding insurance coverage, there is substantial uncertainty about the adequacy of this approach alone. Meeting the unique needs of the poor will require a multi-pronged strategy as well as monitoring efforts to ensure that problems are detected and brought to the attention of policymakers in a timely manner.[2]

This chapter focuses on how various reform approaches would affect access to care for the poor. To this end, the Commission developed a set of goals for reform. The chapter evaluates current reform proposals in light of these goals with special attention to three issues: the impact of cost-sharing mechanisms on access to care; the ability of the poor to exercise choice, either among competing accountable health plans or among a diverse set of providers; and the potential of various approaches to ensure that the poor actually receive appropriate care. In some cases, solutions are offered; in others, the Commission simply raises questions about the trade-offs being made. Some policy options are intended to improve access for those poor who are geographically isolated, while other options apply to all the poor.

RECOMMENDATIONS

Health care reform should pay special attention to the challenges involved in meeting the health care needs of the poor. Efforts to monitor access to care for

[1] In addition to the poor, there are other vulnerable groups of concern to policymakers in the design of system reform. Some are vulnerable because of where they live: those in rural areas, especially frontier counties; and those in underserved inner-city areas. Ethnic and racial minorities are vulnerable because of the lack of resources, cultural and language barriers, and discrimination. Other vulnerable groups include the chronically ill and disabled, high-risk pregnant women and their infants, and the homeless (U.S. Bipartisan Commission on Comprehensive Health Care 1990; Aday 1993).

[2] The Commission recommends using surveys to monitor access for Medicaid beneficiaries and other low-income persons in Chapter 18.

the poor are an essential element of reform to ensure that problems will be identified and brought to the attention of policymakers.

Eligibility for premium subsidies should be based on income rather than on welfare status.

Health care reform should limit cost sharing (copayments and deductibles) for those low-income persons eligible for premium subsidies. If cost sharing for the poor is more than nominal under health reform, a catastrophic limit on cost sharing lower than that applied to the general population should be established.

The burden of establishing eligibility for reduced cost sharing should not fall on providers of health care. Neither should providers or health plans have to absorb the difference when patients pay reduced cost-sharing amounts. Reduced cost sharing should be financed by the government.

Under approaches to reform that emphasize managed competition, provision should be made for the continued funding of essential community providers during a transition period.

If the Medicaid program is maintained under health care reform, Medicaid fees should be raised to Medicare levels.

In Chapter 4, the Commission also recommends that balance billing of those eligible for cost-sharing reductions should not be permitted.

GOALS

The most significant barrier to access for the poor is the lack of health insurance. Even with universal insurance coverage, other access barriers, such as the geographic distribution of providers, cultural differences, and other financial barriers, would remain (Ginzberg and Ostow 1991; Menken 1991). Under some reform proposals, these barriers may be exacerbated due to diminution or elimination of publicly supported programs or institutions that serve poor populations.

Universal Coverage

The extension of coverage to all populations should be a major goal of health system reform. This would move the nation toward improved access to health care.

Evidence about the importance of insurance for access to care can be obtained by comparing the process, quality, and outcomes of care for the insured and uninsured (OTA 1993). The

uninsured are less likely to have a usual source of care than those with any type of insurance. Of those with a usual source of care, the uninsured are also less likely to have a physician's office as their source of care, and they are less likely to see a specific physician than those with Medicare or private insurance. Of persons with a usual source of care, those without insurance experience longer travel and waiting times for care than those with private insurance (Cornelius et al. 1991).

Those without insurance are less likely to receive services, including preventive services, than those with insurance. For example, women without insurance are less likely to have blood pressure checkups, cervical smears, glaucoma testing, and clinical breast examination (Woolhandler and Himmelstein 1988). Uninsured patients are less likely to receive in-hospital cardiac procedures, such as angiography, coronary artery bypass graft, and angioplasty (Wenneker et al. 1990). Similarly, sick newborns without health insurance coverage receive fewer services than privately insured sick newborns (Braveman et al. 1991).

Those without health insurance have poorer health outcomes for specific conditions. For example, those who lack insurance have poorer birth outcomes (Braveman et al. 1989). Women without health insurance (and those with Medicaid) have more advanced breast cancer when diagnosed and their survival rates are lower (Ayanian et al. 1993). The uninsured also have a higher risk of in-hospital mortality than the insured (Hadley et al. 1991).

Further evidence concerning the importance of insurance in reducing barriers to access is provided by the success of Medicaid in improving access for the previously uninsured poor. Although barriers to mainstream care remain, the Medicaid program has been largely successful in increasing access to health care services and improving the health status of those enrolled in the program (Davis and Schoen 1978; Davis and Reynolds 1976). When beneficiaries' eligibility for Medicaid terminates or when there are program cuts, access to health care diminishes and health status deteriorates (Lurie et al. 1984; Lurie et al. 1986). When Arizona did not have a Medicaid program, for instance, poor children saw physicians 40 percent less often than poor children in other states (Blendon et al. 1986).

Other Goals

While the extension of health insurance to uninsured populations is crucial to improving access, the provision of health insurance alone may not ensure adequate access to health care. Other barriers to access will remain to some degree, depending on the type of reform enacted. To address those barriers, this section discusses other goals relevant to improving access.

Reducing Financial Barriers. Patient cost-sharing provisions, which are incorporated into most health reform proposals, are generally included to make the consumer cost conscious and thus limit total health expenditures. Yet consumer cost sharing, including deductibles and copayments, should not be designed so as to hinder access to appropriate services. While cost sharing may serve its purpose for middle- and upper-income consumers, it may cause the

poor to reduce services that they need. Cost sharing may also undermine the financial stability of the severely ill.

Empirical evidence supports these concerns. The RAND Health Insurance Experiment provides some evidence that copayments decrease some health outcomes for lower-income groups. Although for most persons free health care did not improve health outcomes, it improved the health outcomes of poor persons with certain health conditions and elevated risk, such as hypertension (Brook et al. 1983; Keeler et al. 1987). Additionally, in response to cost sharing, low-income groups reduced both appropriate and inappropriate care (Lohr et al. 1986).

These concerns have been recognized in the Medicare and Medicaid programs. State Medicaid programs, for instance, are allowed to impose only nominal copayments on some beneficiaries, and no cost sharing requirements are permitted for children and pregnant women. Additionally, physicians are precluded from balance billing Medicaid beneficiaries, including those who are also eligible for Medicare.

Consumer Choice. Reflecting fundamental American values, the incorporation of the principle of freedom of choice is seen as an important goal for health reform. Consumer choice can operate on several levels, serving a range of purposes. First, preservation of consumers' ability to choose health plans and providers is viewed as a means to protect longstanding personal relationships with providers. Second, consumer choice is a mechanism for accommodating diverse needs of different population groups. Third, and perhaps most important with respect to the underserved, choice provides a mechanism for patients to respond to individual physicians or health plans that provide poor quality care. Choice empowers patients and ensures that the system responds to their concerns. An array of choices thus should be available to vulnerable populations that goes beyond the lowest-priced plan.

Availability of Providers. Health reform should provide for an adequately dispersed distribution of providers so that care can be obtained by all populations in a timely fashion. The locational barriers that currently exist should be minimized to the extent possible. The practice locations of nonphysician practitioners is discussed in greater detail in Chapter 14.

Currently, many of the poor and physicians are located in different areas. Physicians, especially primary care physicians and office-based specialists, tend to establish practices in higher-income areas (Elesh and Schollaert 1972; Guzick and Jahiel 1976; Miller et al. 1978; Knaap and Blohowiak 1989; Kindig et al. 1987; Fossett et al. 1990). The reasons for this are both economic and noneconomic (Fossett 1990; Elesh and Schollaert 1972; Steinhauer et al. 1990). Among the noneconomic reasons are closeness to home, safer environment, and treating social peers (Steinhauer et al. 1990). Physicians may also feel more comfortable treating mainstream illnesses and avoiding cases of AIDS and drug addiction that are more common in poorer neighborhoods (Rodgers 1991).

Although much of the research literature is somewhat dated, the racial composition of neighborhoods also affects physician distribution. Elesh and Schollaert (1972) found that race affected physician location in Chicago, even controlling for income. General practitioners were less likely to practice in census tracts that were more than 90 percent African American. African American census tracts had 60 percent fewer physicians than other tracts. This was less often the case for specialists because of their concentration in the central city near hospitals. Research on the distribution of physicians in Pittsburgh lends further support to the notion that, controlling for income, race is a factor in physician location (Kaplan and Leinhardt 1973). A more recent analysis of the geographic distribution of primary care physicians in Cook County, Illinois, found that the physician-to-population ratio in white areas was 48 percent higher than in African American areas (Kletke and Marder 1987).

The lack of easily accessible primary care providers affects care, even for the insured. For Medicare beneficiaries, there is poorer access to services in areas with fewer physicians. Rural Medicare beneficiaries used fewer services than urban beneficiaries, but were more likely to be hospitalized. Beneficiaries living in urban Health Professional Shortage Areas and in urban poverty areas were less likely to see a physician during the year, were more likely to use outpatient departments for care, had more outlier hospital days, and had a mortality rate higher than the national average (PPRC 1992; 1993).

Provider Payment Rates. Low payment rates for treatment of the poor also present an obstacle to care if providers have the opportunity to treat other patients for higher fees. Previously, the Commission indicated its concern about the low level of Medicaid fees relative to those of other payers and suggested that access to care would remain elusive as long as that disparity existed (PPRC 1991).

If the Medicaid program remains intact after health reform or if lower fees are paid to those providers or plans providing services to the poor, then providers and plans might not adequately serve those beneficiaries. Most studies have found that higher Medicaid fees increase both the likelihood that physicians will treat any Medicaid patients and the number of patients they treat (Davidson 1982; Davidson et al. 1983; Hadley 1978; Mitchell 1983; Mitchell 1991; Mitchell and Schurman 1984; Perloff et al. 1986; Sloan et al. 1978; and Yudkowsky et al. 1990).[3]

Studies that have examined the relationship between fee levels and access to care for Medicaid beneficiaries have concluded that Medicaid fee levels influence the site of care, but not the amount of care provided. Medicaid beneficiaries in areas with higher fees are more likely to receive care in physicians' offices (Long et al. 1986; Cohen 1993). Conversely, those in states with lower fees are more likely to receive care in emergency and hospital outpatient departments.

[3] For a more complete review of this literature, see the Commission's 1991 report, *Physician Payment Under Medicaid.*

Improving Cultural Sensitivity. To improve access, health plans and providers need to consider cultural and language differences when delivering care. Culturally based attitudes and language differences appear to influence patients' willingness to seek care and the nature of their interactions with health professionals. For example, people who speak little or no English often cannot set up appointments, describe their symptoms, or understand instructions. And even for those who speak English, cultural attitudes about communication, and the nature of life, death, and illness, may make it difficult to establish rapport and understanding with a provider.

Although there are few studies of cultural barriers, providers, health plans, and state Medicaid programs are recognizing the need to provide culturally appropriate services. In Miami, health maintenance organizations (HMOs) were able to attract Hispanic immigrants because they had Hispanic practitioners, but were unable to enroll non-Hispanic Caribbean immigrants because of the lack of health professionals from those ethnic groups (Siddharthan 1990). Elsewhere, health departments are hiring interpreters to assist those with limited English skills in making appointments for immunizations and other primary care services, and establishing cross-cultural training programs for agency staff (Larrow 1993). Increasing the number of minority practitioners has also been suggested as a method to bridge cultural gaps.

ISSUES AND OPTIONS

The health reform proposals under discussion in the Congress take a variety of approaches to ensuring access for the poor. This section examines the effectiveness of these alternatives in meeting this broad goal. It is divided into four subsections reflecting the goals discussed above. The first considers the extent of insurance coverage. The second focuses on the potential impact of cost-sharing mechanisms on access to care. In the third section, the ability of the poor to exercise choice, either among competing accountable health plans or among a diverse set of providers, is discussed. The final section considers the potential of various approaches in ensuring that the poor actually receive appropriate care. In some of these sections, possible solutions are suggested; in others, questions are simply raised about the implied trade-offs.

Insurance Coverage

The lower utilization rates and poorer health status of persons without health insurance suggest that extending insurance coverage would remove a significant financial barrier to care. The major proposals under discussion differ, however, in the extent to which all Americans would receive insurance coverage and how quickly such coverage would be extended.

The Commission's analyses of access for Medicare and Medicaid beneficiaries, as well as its understanding of access barriers facing the uninsured, suggest that universal coverage is

perhaps the single most important step that could be taken to improve access to care for the poor. The need for universal coverage may be especially pressing under competitive approaches to reform. This is because competitive pressures may make it more difficult for hospitals and other providers that have traditionally cared for persons without insurance to continue to shoulder this responsibility. The schedule for expanding insurance coverage must be complemented by policies to prevent deterioration of access for the poor.

Patient Cost Sharing

Previously, the Commission took the position that while some patient financial responsibility was appropriate, levels of responsibility should not be so high as to prevent Medicare beneficiaries from gaining access or impose significant economic hardship (PPRC 1987). It now extends this principle to low-income persons.

In most health reform proposals, cost sharing at the point of service is intended to make consumers more sensitive to the price of services and, it is hoped, alter their behavior to avoid using unnecessary health care.[4] The Commission is concerned, however, that some approaches to cost sharing would impede the ability of the poor to seek needed care. It has sought to develop an approach that would maintain some patient financial responsibility while protecting beneficiary access. In developing its recommendations, the Commission also sought to minimize administrative burdens on providers and health plans.

Background. Most of the major health proposals assume that there will be some type of financial protection for the poor in the form of premium subsidies. For example, in the single-payer proposal, Senator Chafee's proposal and the Cooper bill, those whose incomes are below the poverty threshold (which was $11,521 for a family of three in 1993) are fully subsidized. Under Senator Chafee's proposal, all families under the poverty threshold would be fully subsidized and others would be subsidized on a sliding-scale basis after an extended implementation period. Under the single-payer approach, poor families that do not owe income taxes would not pay tax-based premiums.

The Administration's proposal would fully subsidize premiums of those whose incomes are $1,000 or below and those receiving cash assistance under Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI). Others whose incomes are up to 150 percent of the poverty line would receive premium subsidies on a sliding scale.

The Commission's cost-sharing recommendations build on the general agreement of policymakers that premiums for the poor need to be subsidized. It supports the extension of that principle to other forms of financial protection. These options are discussed below.

[4] Generally, single-payer proposals do not include deductibles and coinsurance.

Cost-Sharing Options. To protect the poor, especially those who are severely ill, an effective policy would need three components in addition to premium subsidies: some reduction in cost sharing for individual services, a catastrophic annual limit on total cost-sharing expenditures, and limits on balance billing.

Under the Administration's proposal, cost sharing would be reduced for AFDC and SSI beneficiaries to 20 percent of that for other groups enrolled in low cost-sharing plans (i.e., $2 per visit instead of $10).[5] For others with incomes below 150 percent of poverty enrolled in a plan with a high cost-sharing option, cost sharing would be reduced to that of plans with a low cost-sharing option ($10 per visit). For those with incomes below 150 percent of poverty, there would be no reduction for those enrolled under a low cost-sharing option, however. In addition, reduced cost sharing may not be available within an alliance if it determines that there are a sufficient number of low cost-sharing plans available to enroll poor families (including both those receiving cash assistance and those with incomes below 150 percent of poverty), a policy the Commission finds particularly troubling.

The cost sharing under the Administration's proposal for the poor is generally higher than cost sharing under Medicaid; it is substantially higher for beneficiaries who choose a high-cost plan. In 1991, most Medicaid programs had no cost-sharing requirements; nine had copayments for physician visits, ranging from $0.50 to $3.00 (CRS 1993).

Some health reform proposals would exempt all low-income enrollees from cost sharing, as proposed by the Pepper Commission (U.S. Bipartisan Commission on Comprehensive Health Care 1990). The McDermott-Wellstone single-payer proposal does not include cost sharing for any population groups.

In the Commission's view, cost sharing is necessary to ensure that patients are cost conscious. It finds, however, that the Administration's proposed cost-sharing rates are too high. Cost sharing for low-income populations should follow the current Medicaid policy of permitting only nominal cost sharing.

An effective policy should also ensure that providers do not have to absorb the difference when their patients pay only reduced cost-sharing amounts. If cost sharing for the poor is reduced but not subsidized, as is the case with the Administration's proposal, it would result in lower fees being paid to providers serving the poor. To avoid such an outcome, providers should be paid the regular cost-sharing amount.[6] The difference should be financed by the government.

[5] Under the Administration proposal, cost sharing is $10 per visit in a low cost-sharing plan and 20 percent of the applicable payment rate in a high cost-sharing plan.

[6] For example, a plan would pay $50 to the provider for providing a visit to a middle-income patient who pays $10 at the time of service. It would pay $58 to the provider who sees a patient who pays only $2 out of pocket.

If cost sharing for the poor is more than nominal under health reform, the Commission also recommends the adoption of a graduated catastrophic limit on cost sharing for the poor. Most such limits are fixed amounts. For example, the Pepper Commission proposed a $3,000 limit for both individuals and families. The Administration's proposal sets the limit at $1,500 for an individual and $3,000 for a family. Fixed amounts fail to recognize that the degree of protection may need to vary across income groups, however. A medical bill for $3,000 is more catastrophic for a family with an annual income of $20,000 than for one earning $100,000. While health reform proposals with less cost sharing may not need lower catastrophic caps for the poor, other proposals need reduced catastrophic caps for the poor.

Balance billing should be prohibited for the low-income individuals eligible for premium subsidies, as is now the case for Medicaid beneficiaries. Otherwise, balance bills could deter the poor from seeking needed care. This is consistent with the Commission's previous recommendation that Medicare beneficiaries whose cost sharing is paid by Medicaid should be exempt from balance billing (PPRC 1989).

Basis of Eligibility. To extend cost-sharing reductions to the poor, it is necessary to define who will be eligible for this assistance. Under the Administration proposal, cost-sharing reductions are available to poor persons primarily on the basis of their welfare status. Using welfare status to establish eligibility for cost sharing reductions decreases administrative burdens.

Tying financial protection to welfare status rather than poverty as determined by income has major disadvantages, however. Since people who are poor do not have enough disposable income necessary to afford health care, they need protection whether they meet the categorical requirements for welfare or not. Furthermore, tying financial protection to welfare status would incorporate the wide variations in welfare eligibility into the health care system, institutionalizing inequality in access to care across states. Providing financial protection for those below specified income levels appears to be a better alternative than furnishing it only for those on welfare.

Recent federal health policy has increasingly linked benefits to income, rather than to welfare status. For example, the Congress mandated the extension of Medicaid benefits to pregnant women with incomes up to 133 percent of the poverty level and allowed states to cover pregnant women up to 185 percent of poverty.

Generally, policymakers have recognized that both people below the poverty line and those moderately above it need reductions in cost sharing and premiums. According to the Pepper Commission, those below 250 percent of poverty do not have disposable income available to spend on health care. Senator Chafee's bill provides subsidies for all families under 240 percent of the poverty threshold when fully implemented. The Cooper bill allows only nominal copayments for all households with incomes below 200 percent of the federal poverty line.

Administrative Issues. Most proposals that provide subsidies to the poor would need to determine beneficiary eligibility on an ongoing basis. To minimize administrative costs, eligibility for premium subsidies should be used to establish eligibility for cost-sharing reductions. Further, the burden of establishing eligibility for reduced cost sharing should not fall on providers of health care. Designation of eligibility could be encoded on the magnetic tape of beneficiaries' health care cards (or done in another nonburdensome way) so that providers would have the necessary information to collect the appropriate cost sharing.

Consumer Choice

Both competitive and single-payer approaches to health system reform place a high value on consumer choice. What differs are the types of choices offered to consumers. Under the various managed competition proposals, consumers choose among health plans based on the quality of the services they provide and the premium charged. Under single-payer approaches, consumers select among providers. With respect to the poor, the question becomes one of effective choices. That is, does the proposal ensure that low-income people will have access to a range of alternatives?

This section considers the potential impact of various proposals on the choices available to low-income people. It also considers the implications of one consequence of limited choice: concentration of certain populations in a single health plan or among a small set of providers.

Effective Choices. In theory, managed competition ensures choice by creating a level playing field that makes health plans indifferent to whom they actually enroll. This level playing field is created via reform of the small group insurance market, oversight of marketing practices, prohibition of discrimination against potential enrollees based on individual characteristics including health status, community rating of premiums, and adjustment of premiums paid to plans to reflect the risk of serving their enrollees. In fact, some have argued that if these mechanisms work well, some plans will seek a competitive niche by specializing in the care of certain populations, for example, AIDS patients (Ash 1993).

There are several reasons to suspect, however, why this promise of choice may not hold up in practice for all segments of the population. First, the structure of premium subsidies will likely limit the ability of the poor to choose among competing plans. Under the Administration's proposal, subsidies would be provided that are sufficient to cover the costs of enrolling in plans with premiums at or below the weighted average.[7] Although low-income individuals would still have the opportunity to enroll in any plan offered in the alliance, few may be able to afford to enroll in those with premiums beyond the subsidized level. Rice and his colleagues (1993) cite studies in Massachusetts and Vermont that found that families with incomes below 200 percent of the poverty line had little or no disposable income to contribute to health

[7] This differs from the Chafee and Cooper bills, which subsidize premiums only for the lowest-cost plan.

insurance premiums. If this were also true at a national level, about 80 million people (32 percent of the population) would be able to "choose" only plans with the lowest premiums.

Constraints on premium subsidies are probably inevitable given pressures to reduce the amount of new federal spending under system reform. It is important to recognize, however, the potential impact of such constraints on access. First, the poor will likely have limited access to fee-for-service plans (if these eventually have higher premiums than managed care plans, as some expect) or ability to use point-of-service options under other plans. While this may be desirable as a means of ensuring cost containment, it could be problematic for residents of areas with low managed care penetration. Consider, for example, the case of a person who no longer has the option of seeing a family physician in a small town and must travel to a bigger town where a managed care plan is located.[8] A broader concern, however, is that low-income consumers could be trapped in plans that provide poor service; while others could vote with their feet in such circumstances, the poor could not afford to exercise this right.

Opportunities for choice will depend upon the effectiveness of mechanisms designed to ensure fair competition. If these mechanisms do not work well, plans will compete not by developing the services that consumers demand but by seeking not to enroll persons perceived to be either more expensive or more difficult to serve.

Although risk adjustment is most often discussed in connection with competitive approaches to reform, it could also be important under a single-payer model. If payment (whether fee-for-service to individual practitioners or capitation for organized systems of care) is pegged to cover average costs, then providers will have incentives not to treat or enroll patients viewed as either sicker or simply harder to manage.

The Commission has reservations about the adequacy of available techniques for risk adjustment to ensure adequate compensation for the additional costs associated with serving certain populations.[9] Faced with less-than-adequate payment, plans could engage in subtle methods of risk selection that would be difficult to discourage via marketing rules or imposition of other requirements on plans. For example, a health plan might intentionally underserve sick patients in order to encourage them to switch to another plan (Enthoven and Kronick 1989). Plans may also choose some enrollees or discourage others by location of their facilities, selection of network providers, and marketing practices (Freund and Lewit 1993). Finally, some large national plans could choose not to compete in alliances that have a higher-than-average concentration of poor residents.[10]

[8] There is a provision under the Administration proposal that would increase the premium subsidy to low-income families that are unable to enroll in a lower-than-average cost plan that serves the area where they reside.

[9] For a more detailed discussion of risk adjustment, see Chapter 8.

[10] Under the Administration's proposal, payments to plans are based on the alliance-wide share of Medicaid beneficiaries. Although this blinds plans within an alliance to an individual's Medicaid status, a substantial number of Medicaid beneficiaries within an alliance would drive down the weighted average premium due to the cap on Medicaid's contributions on behalf of its beneficiaries. This could make the entire alliance less attractive than others.

Mechanisms could be put in place that either explicitly ensure that risk adjustment captures characteristics of vulnerable populations or that reduce the need for risk adjustment altogether. The Administration bill, for example, would require the National Health Board to take into account socioeconomic characteristics and Medicaid status in developing a risk adjustment methodology; it also provides for the creation of a technical advisory committee to recommend development of risk adjusters that create financial incentives to enroll the underserved. The Cooper bill also permits using risk adjusters to address access issues.

Other mechanisms, such as risk sharing, would improve risk adjustment but may not mitigate the risk of impaired access for the poor and other vulnerable populations in the early stages of reform (see Chapter 8). Risk sharing has two potential drawbacks. First, it may create such an atmosphere of uncertainty that all plans continue to seek only good risks. Second, it could have a differential impact on plans depending on how well they are capitalized. That is, plans with little financial cushion may have an incentive to restrict access through strict utilization review or queuing to avoid failing before they have the opportunity to be paid for their poor draw. This may be a particular problem for poor persons enrolled in undercapitalized plans.

Even if risk adjustment makes enrollment of the poor relatively more attractive, lack of adequate adjustments for quality measures in performance reports would also serve as a disincentive for plans to enroll poor individuals. This is because performance measures published as part of a plan's annual report will be influenced by the underlying health status or socioeconomic circumstances of plan enrollees. This is true for outcome measures; for example, the rate of hospitalizations for pediatric asthma may rise with increases in low-income enrollment because of the higher prevalence of asthma among poor children. It also may be true for process measures; for example, performance in providing childhood immunization will be affected by how difficult it is to reach and educate parents.

Presenting separate plan performance measures for the poor and the nonpoor could alleviate this problem. Alternatively, measures that are highly correlated with socioeconomic status could be excluded from reports. The ultimate goal is to develop adjusters for the performance measures that are used in reports (see Chapter 10).

Other strategies designed to increase market share may have an adverse impact on the poor. Plans may, for example, simply find that enrollment of a substantial number of low-income individuals makes them less attractive to middle- and upper-income patients.

The location of providers may also affect opportunities for choice under either competitive or single-payer approaches. Imagine, for example, if only one of three plans offered in an alliance has facilities or contracts with providers in an inner-city neighborhood. Residents of these areas face very different trade-offs in considering the merits of various health plans compared with people who live in areas having more providers. Depending upon the adequacy of public transportation, residents of underserved areas thus may have no other choice except to pick the more accessible plan, even if it is less attractive for other reasons.

A similar situation arises under single-payer proposals, except with respect to choices among individual physicians rather than plans. This is already a problem in both Medicare and Medicaid, as demonstrated by the reliance on emergency rooms and hospital clinics as a usual source of care by residents of areas with few providers (PPRC 1992; 1993).

The Administration's proposal includes provisions that would at least begin to address some of these concerns. First, the proposal bars health plans from any activity—including the selection of a service area—that in any way discriminates against an individual on the basis of race, national origin, gender, income, health status, or anticipated need for services. Moreover, in selecting network providers, plans are also prohibited from discriminating because of the providers' own sociodemographic characteristics or those of their patients.

Second, alliances would be granted authority to help providers organize their own health plans in areas with inadequate health services; assistance may include setting up and administering the plan, as well as arranging for favorable financing.[11] In addition, federal grant assistance would be available to help develop community-based health plans and practice networks.

Other mechanisms have also been suggested as ways to ensure choice for low-income people under competitive approaches to reform. Among these are special accommodations to enroll vulnerable groups (such as enrollment centers and toll-free information numbers), programs to educate consumers about the offerings of various plans, and mechanisms to ensure that alliances are responsive to community concerns through grievance procedures or representation on community boards (Columbia University 1993).

Different types of policies would be needed to ensure choice under a single-payer plan. These might include incentives for providers to locate in underserved areas, such as bonus payments or low-cost financing to support private practice or clinic-based practice. Enhanced payment, either in the form of a special needs modifier or risk-adjusted capitation amounts, might also encourage providers to open their practices to low-income patients.

Concentration. One likely consequence of limits on choice is concentration of the poor in a single plan or among a small set of providers. On the one hand, this could be considered desirable if the low-cost plan is actually the most efficient, all other things (including quality) being equal. In addition, concentration in one plan (although not necessarily the lowest-cost one) may also be desirable if that plan is experienced and equipped to meet the special needs of this population.

On the other hand, concentration of the poor in plans or among providers, such as so-called Medicaid mills, that provide service of inferior quality is not desirable. Although the

[11] The alliance may not bear risk for these plans, however.

Commission has considered enrollment composition requirements to be an inappropriate substitute for strong quality assurance mechanisms, the presence of middle- and upper-income people in a plan may make it more likely that problems throughout the plan will be reported and corrected.

A second concern about concentration is what happens when the plan serving most low-income persons performs poorly enough to risk decertification or goes bankrupt. While decertifying the plan might be in the best interest of its enrollees, the problem may not be solved if other plans are not equipped to meet enrollees' needs.

Uncertainty about the implications of concentration for the poor suggests the need for monitoring as an integral part of system reform.[12] Although concentration resulting from an appropriate match between health plan capabilities and the needs of the poor should not be discouraged, monitoring efforts should be designed so that they detect concentration of the poor in plans that provide poor service.

Provider Payment Rates

Several years ago, the Commission indicated its concern about the low level of Medicaid fees relative to those of other payers, commenting that access would remain elusive as long as the disparity existed. This would remain a problem under reform proposals, such as the Chafee bill, that would maintain the current Medicaid program and thus, presumably, its low physician fees. If providers continue to be paid lower fees for treating the poor, then they might not adequately serve those beneficiaries.

If the Medicaid program is maintained under system reform, Medicaid beneficiaries, whose care is largely financed by the federal government, should enjoy access to care comparable to that of Medicare beneficiaries. Medicaid fees should be raised to Medicare levels. The substantial redistribution of resources within the health system anticipated under reform may make this a particularly auspicious time to take this step.

Meeting the Needs of the Poor

Any proposal that provides universal insurance coverage must grapple with how to make certain that low-income populations will be served when the need for care arises. Meeting this need implies that the health system has the ability to provide services that are convenient and accessible, that the services provided are consistent with individual and population health needs, and that care is delivered in a culturally appropriate context.

[12] For a discussion of the Commission's work monitoring access for Medicare and Medicaid beneficiaries, see Chapters 17 and 18.

To consider whether a particular reform proposal will be effective in meeting the needs of the underserved, some assumptions must be made about the context in which care is expected to be delivered. On the one hand, many previous reform efforts have envisioned a single health care system in which the poor receive the same types of services in the same types of settings as middle- and upper-income people. Others have questioned whether this model is either realistic or appropriate to meet the needs of the poor, particularly those in areas separated from surrounding communities by distance, topography, or race and class lines. They argue that a different model of care is needed, one that confronts both the health needs of the poor and the social circumstances in which those needs are addressed.

The Commission raises the differences between these two models here not because one is demonstrably more effective than the other. In fact, what works may differ substantially across communities.[13] The point is simply that the model of care envisioned affects the nature of the proposed policy solutions. Some suggest that the strengths of both models should be combined by aiding health care providers likely to meet the needs of many low-income people, while giving poor families a choice between those providers and mainstream health plans. This section describes some of the proposals to meet the needs of the poor in the context of these two models. For the most part, the major proposals are quite vague. The one exception is the Administration's proposal; as a result, it is easier both to support and to criticize.

Extending Mainstream Health Care to the Poor. As mentioned above, most previous reform efforts have focused on providing the poor with access to mainstream care. The Medicaid program, for example, is based on a traditional indemnity insurance model and until recently, largely relied on fee-for-service payment to private practitioners.

There are several rationales for integrating the poor into mainstream care. First, it promotes equitable treatment. Second, it is potentially less stigmatizing than receiving care in clinics. And third, it potentially improves the quality of care available to the poor. This can occur first by improving access to care for the poor in practitioner's offices, rather than in emergency rooms and subspecialty hospital outpatient clinics. While the latter is certainly better than no care at all, it is expensive, reactive, and does not provide a stable, continuous relationship with a health professional. Quality may also be improved by involving the middle class in the health care delivery system that also serves the poor.

If providing access to mainstream care is the goal, then reform proposals should create incentives for private practice in underserved areas and provide special supports that help the underserved gain access to the health care system. This might include outreach and case management services, substantially enhanced bonus payments, favorable financing for construction, expansion or renovation of practice sites, and loan forgiveness for practitioners.

[13] To help gain some insight on this issue, the Commission is funding a project that will identify the successful elements of primary care delivery programs serving the inner city. Results should available in late 1994.

For example, the Medicare program makes bonus payments to physicians located in Health Professional Shortage Areas (see Chapter 22). Issues affecting the ability of nonphysician practitioners to provide care in underserved areas are discussed in Chapter 14.

By integrating the poor into either the system of alliances or into a single government-sponsored health insurance plan, most of the major reform proposals embrace this approach. The Administration proposal, in particular, envisions a substantially changed role for providers that have traditionally served the poor—public hospitals, community health centers, and health departments—as patients are empowered by insurance coverage to seek care elsewhere. Over time, these institutions will be integrated into the networks of larger health plans, will band together to form their own community-based health plans, or will disappear. To facilitate these transitions, the bill includes substantial funding for both grants and loan guarantees to support development of community practice networks and plans. Federal dollars could be used for planning; acquisition, expansion or modernization of facilities; recruitment and training of staff; and development of information systems.

Developing Alternative Delivery Systems to Serve the Poor. An argument can be made that mainstreaming is neither a realistic nor appropriate policy solution. In part, this approach reflects frustration with previous policies. As mentioned earlier, the barriers faced by most Medicaid beneficiaries and certain vulnerable Medicare beneficiaries suggest that insurance mechanisms alone are insufficient to ensure access (PPRC 1991; 1993). Moreover, there is skepticism about whether payment policies could ever be generous enough to overcome other drawbacks of practice in underserved areas such as concerns about safety; fewer opportunities to interact with professional colleagues; and limited ability to influence environmental factors affecting health such as homelessness, drug use, violence, or persistent poverty.

Beyond these concerns, however, is the issue of whether the model of care that works for relatively healthy middle- and upper-income people can be responsive to the special medical and nonmedical needs of vulnerable populations. Heinen and colleagues (1990), for instance, comment that even well-established managed-care organizations have limited experience with patients needing continuous and intensive medical supervision such as those with certain disabilities, mental retardation, and chronic mental conditions.

The extent of care provided by private practitioners in underserved areas is also inadequate. In a 1990 survey of physicians in Harlem, Brooklyn, and the South Bronx conducted by the Community Service Society of New York, many did not accept Medicaid, were open fewer than 20 hours per week, did not provide after hours coverage, and had no hospital admitting privileges (Rosenthal 1993).

In light of these circumstances, some look to institutions that have traditionally served low-income and hard-to-reach populations as the backbone of a strengthened delivery system for the underserved. Years of experience have sensitized these community-based providers to the

medical and social needs that result from poverty and disfranchisement. Some have already responded by developing special programs to prevent disease, coordinate services, and improve outreach. In Dallas, Denver, and Miami, for example, these efforts have led to the development of integrated service networks linking primary care clinics with major teaching hospitals; these include triage mechanisms to ensure that patients are seen in the most appropriate settings (Butler 1993).

If effective response to population needs is the goal, policy initiatives should be targeted at enhancing support for systems of care that already serve the poor and providing a package of services appropriate to both their health needs and sociocultural circumstances. These enabling services might include transportation, home visitation, community outreach, parenting and abuse counseling, and translation services. Given the crumbling physical plant of many inner-city hospitals and the narrow margins under which they and many community-based clinics operate, targeted support could help these institutions build more responsive primary care delivery systems.

The Administration's proposal stands out among others in its plans to strengthen core public health functions and continue the flow of federal dollars to safety net institutions. Among the initiatives advanced in the proposal are special payment rules for essential community providers during a transition period, grants to hospitals serving vulnerable populations, and substantially increased funding for the existing community and migrant health center program.[14] Continued funding for these providers is essential under reform approaches that emphasize managed competition.

Even so, the Administration's proposal may fall short in ensuring the development of an infrastructure specially tailored to and responsive to the unique needs of the poor. The plan assumes, for example, that community-based providers will continue to be needed only in the short term. This is reflected in its special treatment of essential community providers during the first five years of reform. These providers are defined to include community and migrant health centers, homeless program and public housing providers, family planning clinics, Indian health programs, providers receiving grants under the Ryan White Act, maternal and child health clinics funded under Title V of the Public Health Service Act, rural health clinics, school clinics, and community practice networks receiving Public Health Service grants for plan development. The proposed legislation also directs the Secretary of Health and Human Services to establish standards for other categories of providers, including health professionals located in underserved areas, public and private hospitals providing a substantial amount of care to medically underserved populations, and other similar public and private nonprofit agencies.

[14] Senator Chafee's bill also envisions using federal grants to assist with delivery in inner-city and rural areas.

During the first five years of reform, all accountable health plans will be required to contract with these essential community providers with payment based either on the alliance fee schedule or Medicare methods. After this transition period, the assumption is that these providers will either wither away because they are no longer needed, integrate into existing health plans or bond together to form their own health plans that can compete in the regional alliance. Since this assumption may be incorrect, it would be important to conduct an assessment of the effect of this provision and its elimination.

This approach also is envisioned (though in a less expansive fashion) under the Cooper bill. That proposal provides transitional support to federally qualified health centers, rural health clinics, and safety net hospitals primarily to help them plan and develop their own accountable health plans. About $55 million would be provided for these activities in each of the first five years under reform. This proposal would not require health plans generally to contract with essential community providers, however.

There are questions about whether the level of transitional support would be adequate or whether five years is sufficient time to make such substantial changes. This is because of the substantial uncertainty about the future for community-based providers and the patients they now treat. How well these providers will fare and whether an alternative to mainstream medical care will be able to sustain itself is open to question, and should be assessed before special payment rules are phased out. The factors affecting their future are discussed below.

Care Seeking Patterns of the Newly Insured. Broader insurance coverage could provide much needed financial stability to community-based providers that now bear a disproportionate burden of uncompensated care. One-third of discharges and nearly half of all outpatient and emergency room visits in public hospitals were uninsured in 1990. Over 40 percent of all patients seen by community health centers in 1991 had no health insurance (Gage 1993; NACHC 1992).

It is unclear, however, whether persons now served by these providers will continue to seek care there or whether with insurance coverage, they will seek it elsewhere. Some suggest that, for example, public hospitals will be unable to compete with their private counterparts and will see their traditional patient base gradually erode (Cooper 1993). Others, including public hospital administrators, are skeptical about whether their current patients will be welcomed or integrated into other practice sites (Pallarito 1993). This proved to be the case in Colorado, where after a Medicaid eligibility expansion, some new Medicaid patients sought care from private physicians but soon found they preferred service at a community health center (Butler 1993).

Remaining Gaps in Insurance Coverage. Publicly financed safety net institutions may still be the principal source of care for those who will remain uninsured after system reform. None of the major reform proposals would extend insurance coverage to illegal aliens, for example, while

some would phase in insurance coverage only as fast as cost-containment goals are achieved.[15] Many of these institutions will continue to provide a substantial amount of free care; this care will be subsidized through a patchwork of federal support, including special payments to academic medical centers, and grants to community health centers and hospitals serving vulnerable populations.[16] These institutions may also remain important entry points into the health system for those eligible for insurance coverage who may not enroll in health plans of their own accord. Among these are the homeless, the chronically mentally ill, and drug addicts.

Operating in a Managed Care World. A vision of the future also requires making a judgment about the capacity of these providers to operate under substantially different incentives than they do today. Whether accountable health plans will include these providers in their networks after the five-year transition period is uncertain.[17]

An argument can be made that these institutions, at least those already experienced in managing care, will survive. A number of public hospitals and community health centers already act as either primary care case managers or prepaid health plans under the Medicaid program. In 1991, community health centers in 26 states participated in prepayment contracts with either Medicaid or commercial HMOs (Butler 1993).

Few of these providers have shared risks for services they do not offer, however. Medicaid contracts with community health centers, for instance, do not typically place them at risk for inpatient services. Moreover, while many of these providers are experienced in case management, they lack the sophisticated data systems necessary for tracking utilization and costs (Butler 1993). Access to capital and the adequacy of risk adjustment will also affect the viability of these institutions in a managed care environment.

Grant Financing. Finally, there are concerns about reliance on grant funding to meet the needs of the underserved, rather than creating an entitlement to certain types of services and payment. Use of grants does have certain advantages. It has been employed for many years to support community health centers and local health departments, and can be targeted to communities with the greatest need. Grants are also effective mechanisms to extend support for activities such as renovation, lease or purchase of capital equipment, and staff recruitment and development. In addition, grant financing has built-in mechanisms for controlling costs, particularly if requirements impose minimum performance standards for grantees to remain eligible for continued funding. Finally, administrative costs are relatively low (Rosenbaum 1993).

[15] The McDermott bill allows for payment for uncompensated care that is essential to overall community health (for example, infectious disease).

[16] In 1990, the City of New York calculated that if undocumented immigrants were not included under health care reform, hospitals in the city would face annual costs of $395 million (Morris 1993).

[17] This is also of critical concern to the few private practitioners currently located in underserved areas. Some fear that physicians now serving the underserved, many of whom are African American or Hispanic, may be pushed out of a more competitive health care market because they are less likely to be board-certified (Somerville 1993).

Historically, however, grants have not proved to be a particularly reliable or effective funding source. Rosenbaum (1993) points out, for example, that most federal grant programs lack an adequate base and automatic adjustment mechanism to ensure that spending levels are not eroded over time. Although the authorizations outlined in the Administration health plan are fairly generous, they do not provide assurances that sufficient funds will actually be appropriated to meet critical needs.

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CHAPTER 10

QUALITY ASSURANCE

In the debate over health system reform, questions arise about efforts needed to ensure and improve quality of care. Because of its emphasis on cost containment, reform will entail challenges for quality assurance. At the same time, reform presents an opportunity to improve quality of care and quality assurance programs systemwide.

There is a potential tension between the goals of cost containment and quality assurance that develops when considering a reform strategy that attempts to pursue both. Yet cost containment need not necessarily lead to lower quality care, if it is true that increased efficiency could be obtained in the health system. In fact, incentives to contain costs could actually improve quality if they effect a decrease in inappropriate services. On the other hand, cost-containment pressure could also lead to a reduction in the provision of appropriate services, and thus may have a negative impact on the quality of care.

One response to the risks posed by cost containment is to institute or enhance programs to monitor both quality of care and access. For example, the legislation that created Medicare's prospective payment system for hospitals also directed the Department of Health and Human Services (HHS) to monitor its impact (P.L. 98-21). HHS and others interpreted this mandate to include examining how the system would affect access and quality of care (Eggers 1987). To accomplish this, peer review organizations (PROs) were charged with monitoring quality of care in hospitals as well as the appropriateness of hospital admissions and surgeries. When the Medicare Fee Schedule was enacted, the Congress again directed HHS to monitor both access to care and beneficiary financial protection.

Health system reform provides an opportunity to accelerate the development and diffusion of tools to enhance the quality of care provided. Recent research on quality, such as the development of performance measures and practice guidelines, is beginning to provide the empirical foundation for better quality assurance methods. Applications of these advances increase the potential for identifying inferior quality, focusing remedial efforts, and improving quality.

Finally, information from the quality assurance process may enable consumers to make better-informed judgments in choosing providers or health plans, thus encouraging competition based on value. At the present time, those who have a choice of health plans have little or no information on quality of care to use in making a selection. Developing quality measures and publishing each plan's performance results could provide a basis for improved consumer decisionmaking.

As background, this chapter first reviews the Commission's previous recommendations on quality assurance. It then presents the primary concerns regarding a quality assurance system for health plans under health system reform. First is the need for a multifaceted approach consisting of a standardized quality performance reporting mechanism, continuous quality improvement (CQI) programs, and a system for external quality review. Second is consideration of the content of a quality monitoring system, including criteria for selecting specific measures to be used in quality performance reports. Next, the roles of various organizations in the quality process are discussed. Issues regarding implementation of a quality assurance system follow this discussion.

RECOMMENDATIONS

The federal government should establish a systematic approach to evaluating and improving the quality of care, building on public and private efforts currently under way.

Reports on quality of care in each plan, including both fee-for-service and managed-care plans, should be provided to consumers. These reports should contain both process and outcomes measures of quality adjusted for case-mix differences; information regarding member satisfaction; and basic descriptive information about the plan's organization, facilities, and methods of paying providers. Measures that cannot be adequately adjusted for case-mix differences should not be included in these reports.

Quality measures for performance reports and the methodologies for their measurement should be standardized for all plans in a market. Certain core measures should be mandated by the federal government, although supplemental quality measures could vary by local market area.

Health system reform legislation should require an external quality review program for managed-care plans. Review should include an examination of the plan's internal quality assurance program, specified quality measures, credentialing of providers, communications with members about rights and responsibilities, grievance process, and medical records.

Federal funding should be increased for research on quality of care, including that to support the development of outcomes and other measures, adjusters for differences in case mix, practice guidelines, profiling, performance reports, and tools to facilitate collection of data regarding quality of care and compliance with practice guidelines.

BACKGROUND

Design of a quality assurance program under health system reform can benefit from previous efforts to improve quality under the Medicare and Medicaid programs. Previous Commission recommendations on quality assurance within these two programs are also relevant to a systemwide program, particularly the principles that guided its recommendations for Medicaid managed care (PPRC 1992). The Commission suggested that managed-care organizations should have quality assurance standards and processes that include:

- successful communication with enrollees about their rights and responsibilities;
- a meaningful grievance process that provides for effective and timely responses;
- an internal quality assurance program that has the capacity to measure the process and timeliness of health care delivery, as well as health outcomes;
- verification of providers' credentials and periodic recredentialing of providers;
- evidence that the board of directors of a plan is accountable and supportive of the quality assurance system; and
- successful completion of an external quality of care review.

In addition to these quality assurance activities within plans, the Commission noted that states should, on a periodic basis, oversee the structure and implementation of these activities in plans serving Medicaid beneficiaries. States should have grievance processes that provide for prompt and effective resolution of complaints that are not promptly or satisfactorily resolved by the plan's grievance process. There should be enforceable federal monitoring of state oversight of quality assurance standards. The federal government should have national quality goals for specific conditions or preventive health care services.

A MULTIFACETED APPROACH TO QUALITY

The most important issue in designing a quality assurance system is the degree of reliance on quality performance reports as a substitute for or complement to externally imposed quality assurance requirements. This section describes and evaluates quality performance reports and external quality assurance systems. It also discusses a quality improvement approach that uses profiling and other tools to evaluate practice patterns and furnishes educational feedback to providers.

Strategies for Ensuring Quality

There are three basic strategies for ensuring the provision of high-quality health care. The first consists of a process for measuring and reporting health plan performance according to a prescribed set of quality indicators. Second is a quality improvement strategy (using profiling and related techniques) that permits continuous raising of goals for health plans, facilities, and providers. The final strategy is to institute external reviews to ensure quality in managed-care plans.

Quality Performance Measurement and Reporting. While quality performance reporting is a component of many health system reform proposals, the movement for health plan accountability grows without waiting for reform. Escalating health care costs have been a major factor in the rising pressure on health plans to demonstrate their quality to purchasers. To do so, mechanisms are required both for measuring quality and for reporting the results in a manner that facilitates comparison among competing plans.

Efforts are progressing in both measurement and reporting of quality. Some organizations are taking the first step, the development of measures. For example, the National Committee for Quality Assurance (NCQA) continues to develop its Health Plan Employer Data and Information Set (HEDIS) as the state of the art evolves. The current version of HEDIS (2.0) is designed to be applicable to managed-care plans and provides a critical first step in establishing performance measures on quality, access, member satisfaction, and financial integrity (NCQA 1993).[1] The recently completed Developing and Evaluating Methods to Promote Ambulatory Care Quality (DEMPAQ) project investigated the use of medical records and claims data-based profiles to derive performance measures. The DEMPAQ measures were developed for fee-for-service physician office care, but could also be applied to managed-care plans (Lawthers et al. 1993).

Taking the next step, a number of managed-care plans, including United HealthCare of Minneapolis and Kaiser Permanente of Northern California, have recently issued reports on quality of care in their plans. NCQA is developing a demonstration project that will use HEDIS as the basis of a performance report for 21 health plans.

Quality Improvement. Continuous quality improvement efforts initiated by various organizations could play a key role in a quality assurance system by progressively developing quality standards and facilitating quality improvement.[2] For this purpose, a CQI process would include tools like profiling to evaluate practice patterns, combining these with educational feedback about evaluation results to providers.

[1] HEDIS is intended for use by independent practice associations and preferred provider organizations, as well as group-model, staff-model, and mixed-model health maintenance organizations.

[2] For general discussions of the role of continuous quality improvement in health care, see Berwick (1989) and Kritchevsky and Simmons (1991).

Compared with traditional quality assurance techniques such as utilization review, physicians find profiling to be a less intrusive, relatively hassle-free way to be alerted to potential problems with patterns of care. The Commission previously pointed out that profiling could play an important role in health system reform, and recent efforts have demonstrated the usefulness of this approach (PPRC 1992). The Maine Medical Assessment Foundation, for example, used profiles of the volume of specific services across areas to change physician behavior (Keller et al. 1990a; 1990b). This project demonstrated that effective profiling needs to be coupled with educational feedback programs. The DEMPAQ project also explored the use of profiling as a quality improvement tool.

External Quality Assurance. In certain situations, states and the federal government have instituted external quality assurance requirements for health plans and providers. The Medicaid Health Care Quality Improvement System (HCQIS) is a case in point. Under HCQIS, goals for quality and access are set by the Health Care Financing Administration (HCFA). Health plans are required to demonstrate their compliance with quality assurance requirements by successfully completing a review by an external organization. The review verifies that a plan maintains an internal quality assurance program that includes (1) verification and periodic reexamination of provider credentials, (2) measurement of access and quality of care, (3) a remediation process for deficiencies identified in the quality of care process, and (4) a grievance process.

The Need for a Multifaceted Approach

To determine a health plan's value, a consumer needs information about both cost and quality. Cost comparisons are facilitated when plans are required to offer a standard package of benefits. Quality performance reports provide information needed for consumers to compare quality.

Some would argue that publicly available reports based on standardized data collection with meaningful indicators of quality would empower consumers to make informed choices, thereby lessening the need for external regulation. Consumers would be able to determine their desired mix of cost and quality in choosing a health plan. Limitations and uncertainties associated with quality performance reporting, however, suggest that these mechanisms alone may be insufficient to ensure quality.

Very little is known about what aspects of quality consumers would find most relevant and important in making choices about health plans. Particular subsets of consumers, such as the elderly, the chronically ill, and parents of young children, may have different interests and values when it comes to assessing health care. Since information needs may vary considerably among consumers, it will be important to use a variety of measures in the quality performance reports. In light of current understanding of consumers' information priorities, this will be especially true during the initial use of these reports.

Equally important may be the manner of presentation of quality information. To be most valuable, quality of care information should be provided in formats that are accessible to a wide range of consumers. Recognizing the limited state of the art in this area, NCQA has initiated a consumer-focused research project to investigate what information consumers want and need in order to select among competing health plans, and what is the most helpful way to present that information.

Further, little is known about how consumers may use information about plan quality in choosing health plans. Using 25 to 50 measures of quality may present a difficult multiattribute choice for most consumers. Instead, most consumers would probably examine a limited number of measures that are most relevant to them when they choose a plan.

Choosing a plan based on a few measures might seem appropriate to some consumers. It is not likely, however, to incorporate all the dimensions of care that need to be considered in evaluating the overall quality of a plan. The use of one or a few measures as a proxy for overall quality would be misleading, because plan performance may vary across different aspects of care. The quality of both individual physicians and hospitals differs for various diseases, treatments, and aspects of care (Sanazaro and Worth 1985; Chassin et al. 1989). In addition, information from more than one year may be required to make the most accurate assessments of quality performance (Sisk et al. 1990).

Not only is it unclear what quality information will be of greatest interest to consumers, but the evidence about the potential of consumers to act on the basis of quality information is also limited. Controlling for cost and distance, Luft and his colleagues (1990) found that patients were more likely to undergo surgery in hospitals that provided better quality care. It is probable that the choice of hospital was made by the patient's physician, however. In another article, Luft (1988) concluded that it was too early to know whether increased availability of quality information would have much effect. Because information from quality reports alone may not force plans that provide inferior care out of business, external monitoring by plans' sponsors (such as employers) and governmental agencies is necessary.

Quality improvement efforts should serve as an important component of any quality assurance system. Quality of care should be improved by using techniques such as profiling of claims and data abstracted from medical records. Comparisons of the patterns with statistical norms or practice guidelines should be made. Educational feedback should be used to modify behavior of providers.

Profiling coupled with educational feedback has been used successfully to improve quality of care. In Maine, profiling with a feedback approach resulted in fewer laminectomies, hysterectomies, and hospital admissions for pediatric medical conditions (Keller et al. 1990a). In six states, educational programs reduced inappropriate use of X-ray pelvimetry (Chassin and McCue 1986). In another case, a process used in 16 ambulatory care practices

demonstrated that profiling and educational feedback improved physician performance of those tasks over which physicians had direct control (Palmer et al. 1985).

Although educational feedback appears to improve quality of care, there may be limitations to what this approach can accomplish. First, the degree of improvement may vary by clinical task with some tasks being less prone to improvement using this approach (Palmer et al. 1985). Second, it is not clear whether voluntary programs will have any effect on the practice patterns of providers who choose not to participate in them.

While quality improvement efforts should be part of any quality assurance system, the most appropriate organizations for conducting such efforts depend largely on the final shape of health system reform. A variety of organizations, such as health plans, professional foundations, PROs, and clinics, could perform the quality improvement functions that the Commission envisions. At this time, therefore, the Commission defers making a recommendation about the structure of a quality improvement system, recognizing the value of approaches currently in use and under development by health plans, providers, PROs, and professional organizations.

The evidence suggests that quality assurance efforts beyond quality performance reports and quality improvement programs are needed, certainly in the short run and arguably in the long run. Even if quality assurance measures approached perfection and quality reports were adequately used, those who argue that government has a fundamental interest in protecting its citizens' health could make a case for external quality monitoring. The cost of poor quality care may be high and, in some cases, the resulting poor outcomes may be impossible to rectify. This concern would be heightened if there were significant cost-containment efforts (such as premium limits) under health system reform that jeopardized access and quality of care. An external quality assurance program would provide a floor below which quality could not drop, and would not make quality assurance dependent on as yet untested approaches, such as performance reports and competition among plans.

These three approaches are not mutually exclusive; in fact, a mixed system featuring quality performance reports, quality improvement efforts, and an external quality assurance program enhances the value of each approach. Such a system would facilitate consumer choice and provide the opportunity to improve quality, while guaranteeing at least a minimum threshold of quality for all plans.

QUALITY MEASURES

Three features of quality of care measures are important in establishing a system to evaluate quality. First, different types of measures---structure, process, and outcomes--should be used to assess quality. Second, different aspects of care, such as immunization rates and rehospitalizations after certain operations, should be assessed. Finally, quality of care measures need to be adjusted to reflect relevant differences in plan membership or the clinical

characteristics of patients. Because the state of the art in making such adjustments is limited, this section offers suggestions on quality measurement in the absence of fully adequate adjusters.

Types of Measures

Quality of care systems have focused on the structure of the delivery organization, the process used in providing care, and the outcomes of that care. Each is important for a successful quality assurance program. Structure includes physical structure, availability of equipment, and credentials of providers. Process concerns both the technical and interpersonal steps taken in providing care to patients. Outcomes are the results of the care provided.

Although quality assurance programs traditionally have focused on structure and process, many now advocate the sole use of outcomes measures. The advantage of outcomes measures is that they are less prescriptive, focusing on results without restricting the process or content of care. In many cases, desirable outcomes are more readily defined and agreed upon than are the processes used or structures needed to achieve those outcomes. In addition, satisfactory outcomes may be accomplished through a variety of means, making outcomes the most appropriate focus for some quality concerns.

Usefulness of outcomes measures alone in quality programs is limited, however. At the present time, there are few outcomes measures and their development is costly. In addition, the processes and structures that influence a specific outcome must be understood in order to use outcomes measures to improve quality. Most important is the need to account for the effects of characteristics of the patient population on the outcomes of treatment rendered.

The availability of outcomes measures for use in quality assurance programs or quality reports is highly limited. While available measures focus on mortality, morbidity, disability, discomfort, and dissatisfaction, most of the research has been on mortality (Lohr 1988). The only nationally available outcome information is HCFA's hospital mortality rates.

The number and type of conditions analyzed are also narrow, but ongoing research and development efforts are expanding the list of measurable outcomes. The Medical Outcomes Study included four conditions: diabetes, hypertension, coronary heart disease, and depression. HEDIS includes emergency room visits for asthma, hospital readmission rates for two mental health conditions, and incidence of low birthweight.

Generally, in order to measure outcomes, significant data collection efforts must be made. A few outcomes, such as death, can be measured with claims or eligibility data. To be interpreted, however, even those measures need additional information, such as adjustments for severity of illness, which is not easily obtained from claims. Most outcomes must be measured with data from patient interviews or medical records. For example, the Medical

Outcomes Study collected information from patient interviews, medical record reviews, and clinical examinations (Tarlov et al. 1989).

Even when outcomes measures are adequately developed for all appropriate conditions, they will not provide enough information to evaluate quality of care. In order to use outcomes results to focus remedial efforts, descriptions of a plan's structure and the processes used in delivery of care will be required.

Consumers will also need additional facts on plan characteristics to judge its appropriateness for their particular needs. Thus, items provided on quality performance reports should include ratios of primary care and specialty physicians to enrollees, enrollee and provider turnover rates, provider financial incentives, copayments, provider credentials, facility locations, and contracts with hospitals and other providers.

The need for all types of measures is demonstrated by the HEDIS project, a system encompassing more than 60 standardized health plan performance measures primarily oriented toward purchasers. HEDIS recommends standardized definitions and specific methodologies for deriving plan-specific performance measures in four categories: quality, access and satisfaction, plan membership (descriptive information on enrollment and stability) and utilization, and finance. The most recent version of HEDIS relies primarily on process measures as quality indicators, except for the four outcomes measures mentioned earlier.

While the current state of the art in quality measurement is deficient in some aspects, important progress continues to be made. For example, with the development of practice guidelines, guideline-related performance measures are being devised to measure the processes of care. The Agency for Health Care Policy and Research (AHCPR) is now preparing a monograph on how to construct practice guideline-related performance measures. AHCPR is also working on medical review criteria and performance measures for its practice guidelines; work on five guidelines is under way, and work on other guidelines is planned (Palmer 1994).

Aspects of Care

Although it would be difficult and unwise to legislate specific measures of quality, principles for their selection can be produced. Six principles that could be used to guide selection are discussed below. While the immediate implementation of a quality assurance system that fully incorporates these principles would be challenging, these principles could be used to direct research and development efforts.

First, measures that could significantly improve processes or outcomes of care should be the focus of initial research and development (NCQA 1993). Selected quality measures should have the potential to make a positive impact on patient health. Especially because plans will

likely focus their quality assurance efforts on targeted areas, those areas should ideally be important enough to justify the added scrutiny.

Second, measures of quality should span many dimensions of care, including clinical quality, acceptability of the care to the patient, and accessibility of the care provided. The delivery of high-quality care depends on the degree of success achieved along these dimensions. Many outcomes and guidelines-related measures will provide indicators of the technical or clinical quality of care. Acceptability of the care from a patient's perspective may be evaluated through use of member surveys, which are already being used in some health plans. Finally, accessibility of care is an important dimension that warrants additional study of potential measurement techniques. Measures of accessibility should include health plans' referral and contracting patterns, ratios of specialists to primary care providers, average waiting times for appointments, office waiting times, and the geographic location of providers.

Third, measures of a plan's quality should encompass the range of medical care provided by the plan, including high-volume services or conditions treated. Most previous quality assurance efforts have focused on hospitalizations, especially for certain conditions. Since most of the care patients receive is in ambulatory settings, it is important that quality of care programs include these services. The state of the art for assessing quality in ambulatory care is much more limited than that in hospital care, but has improved recently (Palmer 1988; Daley et al. 1988).

Fourth, high-risk services should be well represented among the measures of quality selected. Because these services have the potential for untoward outcomes, such as medical injuries or death, monitoring them is important. Deficiencies in quality for lower-risk services (with the exceptions of preventive and chronic care), while still relevant, have a lesser impact on patient health and should receive less emphasis in the selection of measures.

Fifth, quality measures should encompass those for preventive services. Since many preventive services, such as childhood immunization and disease screening, have the potential to reduce the incidence or severity of illness, improve quality of life, and sometimes even lower future health care expenditures, adequate access to these services is desirable. Because the process of providing preventive services is closely linked with the desired outcome (e.g., immunization with disease prevention), the use of currently available process measures is particularly well-suited to measuring this aspect of quality.

Sixth, provision of required measures should not place unreasonable burdens on health plans (NCQA 1993). This is important, especially in the short run, because of plans' needs to create systems for data collection. Although this seems obvious, some of the indicators most closely correlated with underlying quality concerns might be extremely difficult or costly for plans to collect. For these, there is a trade-off between the appropriateness and validity of the indicator and the resources needed to obtain it.

Adjustments

Quality measurement results may reflect underlying differences in the demographic or clinical characteristics of patients in addition to variations in the quality of care provided. To control for these differences and distinguish true variations in quality, adjustments that account for relevant underlying characteristics of the patient population are needed. Use of unadjusted quality of care measures can be misleading to consumers, plan sponsors, and regulators.

Evaluating Adjusters. Outcomes and process measures used for quality reports need to be adjusted for case mix or other relevant differences among plans. The rationale for quality measurement (especially outcomes measurement) is that the major influence on quality is the provider. There are other factors that affect outcomes, however. Outcomes may depend most heavily on comorbidity, although patient attitudes or compliance may also effect them significantly. In addition, demographic characteristics of the patient population may influence measurement results.

Thus, to compare quality of care fairly across plans or providers, adjustments must account for preexisting health status and factors other than care that may affect it. For example, although raw death rates in pediatric intensive care units were found to vary sixfold across nine teaching hospitals, differences in death rates disappeared after adjustment for differences in severity of illness (Pollock et al. 1987).

Adjusters may be needed to account for various factors contributing to differences in measurement results, such as health status, demographic, and socioeconomic factors.[3] Age, sex, and comorbidity factors will be likely initial adjusters. Further, health status adjusters may need to be specific to the condition being measured. For example, in studying outcomes of different treatments for benign prostatic hyperplasia, researchers found that there should be adjustments for the presence of preexisting heart disease (Greenfield 1989). Complicating this, additional adjustments may be necessary for socioeconomic factors. Some plans may have poorer quality measures because patients in those plans are less compliant, even though the plans may have substantial outreach programs.

Short-Term Options. Considerable research needs to be done to develop appropriate adjusters. Although use of quality measures will be hindered by the measurement problems mentioned above, short-term steps could be taken now. The major problem stems from the lack of adequate adjusters, a problem that could be circumvented in the short term by:

- using the measures that are least sensitive to underlying patient-mix characteristics, and

[3] For a discussion of risk adjusters, see Chapter 8.

- separating performance measurement results according to different categories of patients.

Only adequately adjusted measures should be presented in quality reports to the public. Some measures may be less sensitive to underlying characteristics of the patient population, and will be less dependent on the current state of the art for adjusters. These could be presented on initial quality performance reports. Such measures might include provider credentials, turnover rates, and availability; patient turnover rates; and, possibly, patient satisfaction with access and quality of care. Because this step would not include most outcomes and process measures, consumers' ability to judge quality would be limited, yet they would have more information than is now the case. As valid, adjusted measures are developed, they could be incorporated in quality performance reports.

In the absence of appropriate adjusters, quality reports might present performance measures for different categories of patients. Potential categories could include factors thought to be relevant to performance results, among them socioeconomic status, age, severity of illness, and health status. For example, immunization rates might be reported separately for low-income and other income groups, because higher-income populations are likelier to have their children immunized.[4]

ORGANIZATIONAL ROLES IN QUALITY ASSURANCE

Developing a comprehensive quality assurance system will require delineation and coordination of the roles of health plans, the federal government, and others performing quality assurance functions. This section considers the role of health plans and the federal government.

The Role of Health Plans

A quality management program for managed-care plans should have several elements. It should have the capacity to measure the process and timeliness of health care delivery and health outcomes. In addition, the plan should have a process for addressing deficiencies identified in the quality assurance process. It should also verify and periodically reascertain providers' credentials. Finally, it should have to complete successfully an external quality of care review conducted by an independent organization or government agency.

As part of its quality assurance efforts, the plan would need to establish two other elements. First, it should have a process for communicating with enrollees about their rights and responsibilities. This process should serve to improve member satisfaction as well as

[4] The reporting of measures for separate categories of patients could also be valuable for monitoring the quality of care for vulnerable populations.

safeguard quality. In addition, the plan should have a timely and effective internal grievance procedure available to members and providers. Feedback obtained through the grievance process would ideally be used to rectify systemic problems in quality as well as to resolve individual concerns. An external appeals process would be necessary for disputes that could not be resolved internally.

Without a dramatic change in organization of the fee-for-service sector, the adoption of a similar quality assurance system for it might be difficult.[5] The organizational structure of a plan determines the degree to which it can control quality by influencing provider behavior. Since logic dictates that accountability should be demanded of those most able to affect the outcome, accountability for quality arguably should be greater for plans with tighter control. Fee-for-service plans have limited means to influence provider behavior; therefore, their responsibility for quality may be more limited.

At the minimum, a fee-for-service plan should be required to establish utilization review and a grievance process, as such activities are clearly within the purview of such plans. A much broader adoption of continuous quality improvement approaches by fee-for-service plans, professional organizations, and PROs would bring an important innovation in quality assurance for fee-for-service plans.

One way to accomplish this might be to develop organizations for monitoring, evaluating, and improving care (especially ambulatory care) in a geographic area. As discussed above, these organizations could use profiling and education feedback techniques to improve quality. Providers would participate on a voluntary basis, independent of their health plan participation. The Maine Medical Assessment Foundation provides one model for this approach.

Both fee-for-service and managed-care plans should be required to participate in the system of quality performance reporting. Although the data collection effort would be conducted internally by each health plan, this approach should include an audit by some external organization to confirm the validity of data presented in quality reports.

Federal Roles

The federal government should (1) fund, conduct, and coordinate research; (2) set the framework for quality assurance processes and establish national goals; and (3) oversee the monitoring of the quality assurance system. The federal government should develop or fund the basic research needed for quality assurance, such as that for practice guidelines and outcomes indicators. Designating this role to the federal government would avoid duplication of effort, while drawing on the expertise it has developed in the Agency for Health Care

[5] Since fee-for-service plans pay providers on the basis of claims, they have data systems that can be used for monitoring quality.

Policy and Research and HCFA. Other organizations, such as health plans, would draw on the research conducted by the federal government.

Research funded through the public sector should be coordinated with and complementary to that undertaken in the private sector. Criteria used in selecting quality measurement research projects should include the feasibility of implementing results of the work in practice and the potential impact of measurements on patient health. Priority should also be placed on projects that seek to minimize the burden of data collection for health plans. Eventually, the development of measures should encompass a full range of services.

Second, the federal government should set the framework for quality assurance processes. This would involve defining responsibilities of the entities that will play roles in quality assurance, establishing rules for external and internal quality assurance programs, and specifying national clinical and access measures for all health plans. In setting this framework, sufficient flexibility should be maintained so that the system is responsive to local needs. For example, the federal government should mandate certain core measures of quality, but permit supplemental measures to vary by local market area.

Third, the federal government should oversee monitoring conducted by other entities to ensure conformance with federal standards. For example, federal officials could establish the process to be used to monitor internal quality assurance efforts of plans and verify whether monitoring occurred. They could examine a sample of grievances to ascertain whether these were handled promptly and effectively.

Although the federal government would set the framework and basic goals, it should not be responsible for carrying out quality assurance efforts. Even with Medicare, a national program, quality assurance is managed through regional professional review organizations. For Medicaid, a joint federal-state program, states implement quality assurance programs under federal guidance. The federal government would delegate responsibility for the direct management of the quality assurance system, including the external review. Selection of the appropriate entity to manage that system depends on the overall framework of health reform.

This approach would have the advantage of establishing uniform procedures and minimal standards for the entire nation, while allowing for the flexibility that may be necessary to respond to local needs. The role of the federal government would be similar to that prescribed for HCFA under the Medicaid HCQIS.

IMPLEMENTATION OF A QUALITY ASSURANCE SYSTEM

Recognizing the current status of quality assurance developments, the Commission considered three issues related to the implementation of a quality assurance system. These issues are evaluation and enforcement, quality assurance system development, and time frame

for implementation. Although these are of immediate importance, there will be other implementation issues that must be addressed as the design of health reform evolves.

Evaluation and Enforcement

Either evaluating the quality assurance efforts of plans or monitoring their compliance with quality assurance requirements would be necessary in any system featuring externally imposed standards. Currently, many state governments have designed and implemented quality assurance programs for managed-care organizations, particularly for health maintenance organizations (HMOs). This experience makes it likely that states, especially departments of health and insurance, might play a significant role in the quality assurance process under health system reform.

Because selection of the most appropriate entity to perform this task will depend heavily on the structure adopted in health system reform, the Commission decided not to recommend a specific entity to perform this function. Instead, this section describes an approach to evaluating the quality assurance systems of health plans and possible enforcement strategies.

Evaluation. Evaluating plan quality assurance performance could be approached in either of two ways (or a combination of both). A designated government entity could set quality assurance program requirements and directly review plan efforts. Alternatively, plans could be required to be accredited by a specified external organization, such as NCQA. Finally, a public-private partnership in which government and accreditation organizations coordinate roles would be possible.

The first option, direct government oversight of plans, is now used by many states. For example, 27 states have adopted model HMO legislation that was developed by the National Association of Managed Care Regulators. Typically, states require HMOs to have quality assurance procedures that ensure availability, accessibility, and continuity of care. HMOs must have an internal quality assurance program to monitor and evaluate the delivery of health care services, including a system for corrective actions. Many states conduct periodic on-site inspections of HMOs and have established grievance processes to resolve complaints.

Accreditation is another route by which plans could demonstrate their quality. Today, accreditation is for the most part optional, although an increasing number of large employers and several states require it. For HMOs, independent practice associations, and point-of-service managed-care institutions, NCQA conducts accreditation reviews. NCQA standards for accreditation include those for internal quality assurance programs, utilization management, credentialing, members' rights and responsibilities, preventive health services, and medical records. While most accreditation for managed care is conducted by NCQA, the Accreditation Association for Ambulatory Health Care also reviews HMOs and the American Accreditation Program reviews preferred provider organizations. The Joint Commission for

the Accreditation of Healthcare Organizations is also developing an accreditation process for managed-care organizations.

A quality assurance evaluation program could involve a combination of state regulation and private accreditation. For example, the state could be responsible for enforcing market entry criteria and recertification of health plans in order to provide a first level of consumer protection. Those plans wishing to distinguish themselves, perhaps in response to employers' or consumers' demands, could apply for private accreditation.

Enforcement. Regardless of the option chosen, the entity charged with monitoring plan efforts would have to develop an enforcement process with penalties for those plans failing to meet requirements. These penalties range from the most severe, decertification, to the least severe, internal remediation of the problem. Other options include provisional certification, publication of deficiencies in a quality report, and financial penalties.

Immediate decertification of plans that fail to meet quality standards is not likely to be the most satisfactory way to assure compliance with national standards or access to high-quality health plans. Instead, decertification is better left as a penalty of last resort for plans unwilling or unable to meet quality standards.

A less restrictive option would entail placing plans that fail to meet standards on probation while remedial actions were undertaken. Developing an individualized remedial program for plans not meeting baseline quality standards is an attractive option in that it has potential to address the underlying problem and facilitate quality improvement. This option is consistent with the goal of continuous quality improvement. The threat of being placed on remedial status might be insufficient to ensure plan compliance with baseline quality goals, however. This option would be further strengthened by tying in a mandatory remedial program with a sanction, such as a probationary period that would ultimately lead to decertification if the problem were not corrected.

Another possibility is to use the quality reporting mechanism to inform consumers of a plan's failure to meet baseline standards and the reason for this failure. A method for signifying quality concerns could be established, such as a notation indicating that a plan has received only provisional certification or is on probation. This mechanism is consistent with the managed-competition goal of providing consumers with information that they can use to determine health plans' value. While this option may give plans an incentive to meet baseline standards if they believe consumers "vote with their feet" and avoid plans of inferior quality, this option does not, in itself, provide a way to guarantee a minimum quality standard of care.

Financial penalties are another option to encourage plans to meet standards. One alternative would be to permit or require reduction of payments to those plans not meeting baseline quality standards. Such penalties would provide strong incentives for plans to meet standards.

The obvious drawback to this solution is that financial penalties could potentially exacerbate quality problems, adversely affecting patient care.

Quality Assurance System Development

The field of quality assurance is rapidly expanding, as improved measures and systems designed to provide continuous quality improvement are tested and adopted by plans. To encourage progress in the development and use of improved quality assurance measures and systems, several steps need to be taken. As discussed earlier, the federal government needs to fund research and demonstrations of quality measures, adjusters, practice guidelines, quality reporting mechanisms, and new internal quality assurance systems.

Additionally, to ensure steady improvement in the quality assurance system, a process for timely review and updating of measures and enhancement of quality assurance system requirements would be necessary. To retain flexibility, the health system reform legislation thus should not detail specific measures, but should focus instead on areas of interest (such as preventive care) and a process for instituting and updating elements of the quality assurance system. Specific measures could be mandated in regulation. Such an approach would permit the system to incorporate research findings and adopt new measures so that it evolves along with the state of the art.

Time Frame for Implementation

The primary question regarding a time frame for implementing a quality assurance system following health system reform is what can be reasonably expected at the outset and what changes can be planned for the future. While some experience and expectations regarding externally imposed quality assurance requirements can be drawn on, particularly for managed-care plans, the issues related to quality reports and quality improvement programs are much less predictable. The time required to implement such approaches may vary by states and plans.

State implementation involves two issues. First, states will need a legislative cycle (one to two years depending on the state constitution) to pass legislation that conforms with federal requirements. Second, some states will have to develop the capacity to regulate quality of care, while others will have to expand their capacity. Because 27 states have adopted model HMO legislation recommended by the National Association of Managed Care Regulators and several other states now regulate HMOs, most states have expertise, but will need to expand their efforts. The time frame required for capacity expansion should be relatively short.

The ability of plans to meet new quality assurance requirements will vary. The work completed by NCQA and by HMOs and clinics provides a valuable foundation for new quality assurance requirements, facilitating the implementation of changes that would be required by health system reform. In response to purchaser demands, many HMOs and clinics

have improved their data collection and reporting capabilities over the past several years, but the approaches they now use would need to be standardized to permit comparisons (GHAA 1993). These HMOs and clinics have demonstrated that changes could be made in a reasonable time period (three to five years).

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CHAPTER 11

DIRECTIONS FOR REFORM

The chapters in Part I of this report have focused on several crucial dimensions of health system reform. The Commission has approached these topics by analyzing various design issues and assessing the options. In this process, it has drawn on the approaches contained in various reform proposals before the Congress and has offered its recommendations for structuring policies to enhance their effectiveness, given current data and system capabilities.

In the process of studying the specific topics, the Commission decided to go beyond recommending strategies to enhance particular proposals to see whether some ideas for desirable directions for reform were emerging from its discussions and analyses. The Commission's search for a consensus on directions for reform had roots in its desire to make an affirmative statement on the need for reform while trying to address its reservations about various options, as reflected in the recommendations set forth in other chapters.

The Commission's approach incorporates two core concepts. One is the idea of a national alliance that makes available a choice of health plans. This national alliance, in concert with existing insurance arrangements, could ensure that all Americans have coverage, whether they are employed or not and regardless of who pays for their coverage. If coupled with an individual or employer mandate, then universal coverage could be guaranteed. The second core concept is that the choices offered under this national alliance would include one publicly administered fee-for-service plan, much like Medicare, and an array of privately administered managed-care plans available in local communities.

RECOMMENDATION

A national alliance should be available to individual and group purchasers, including those who currently do not participate in private insurance systems. In a manner similar to Medicare, it would offer a publicly administered fee-for-service plan and privately administered managed-care plans available in local communities. This option would be compatible with a variety of health reform proposals. It could be used to guarantee universal coverage by automatically covering anyone not otherwise insured.

These ideas are not intended to be a full proposal for reform. In fact, the Commission believes that they are compatible with different choices on some of the difficult political issues, such as tax-based versus premium-based financing or employer mandates versus individual mandates. Elsewhere in this report, the Commission has recommended that

combinations of market forces and expenditure limits may create the possibility of harnessing the best features of both (see Chapter 2). Similarly, it shares the desire of many policymakers to maintain the viability of both fee-for-service and organized systems of care so that consumers and physicians alike are free to choose the system in which they are most comfortable.

This chapter first explores the rationale behind the Commission's support for these concepts. It then describes the core concepts in somewhat greater detail, including a discussion of two important design issues that the Commission did not attempt to resolve. Finally, the chapter examines how the core concepts could be compatible with different approaches to health system reform.

DEVELOPING DIRECTIONS FOR REFORM

As the debate on health system reform has intensified over the past year, numerous proposals have been placed on the congressional agenda. The leading proposals represent a wide array of approaches for structuring reform to accomplish the goals most policymakers share. All enter the debate with a desire to increase coverage, control costs, and improve the quality of care. Some would add other goals to the list: to achieve universal coverage or to maintain the viability of choice over how health care is obtained.

The specific approaches range from those that have a high degree of government involvement to those that keep government as remote from health decisions as possible. The extent of variation, however, is greater on the financing side than on the delivery side. On the delivery side, every major proposal maintains a role for both fee-for-service medicine and organized systems of care. Proposals may tilt the balance toward one or the other, but none would fully eliminate the role of either type of delivery system.

The Commission has identified features that it supports in essentially every proposal on the table, one of the most vital being the goal of universal coverage. Another key feature found in several proposals is the preservation of a role for employer innovations in cost containment and quality measurement and improvement. Others that appear in some form in most proposals are provisions for medical malpractice reform and the need to develop a system for risk adjustment or risk sharing.

At the same time, the Commission has identified shortcomings in at least some aspects of every proposal it has examined. In its discussions over the past several months, it has expressed the following reservations about specific aspects of various reform proposals:

- the overall complexity of some proposed systems;
- whether existing data systems can support the varying demands of expenditure limits, premium limits, and quality performance reports;

- how expenditure limits can be designed to treat fairly different types of health plans and the residents of different states;
- whether rate setting can be effective without a means to address volume;
- whether a system of regional alliances can be designed and implemented in just two to four years;
- whether state-based alliances would limit access to care across borders and complicate the tasks of multistate employers, insurers, and providers;
- whether corporate innovations can be preserved and encouraged;
- how the needs of chronically ill individuals would be met; and
- how the poor can be guaranteed affordable care and meaningful choices among plans.

The details of these evaluations are described elsewhere in this report, and the Commission has made recommendations to suggest better ways to address these issues or to remedy what it sees as limitations in specific proposals. The concepts described in this chapter for structuring reform go a step further by suggesting possible ways to minimize the tensions between potentially competing objectives.

The first tension is between guaranteeing cost containment through premium limits and letting market forces operate freely. The Commission has expressed its concern that premium limits could create unintended inequities because of data problems, the inability to adjust adequately for risk, and barriers to entry of new plans into markets (see Chapter 3). The suggestions in this chapter might alleviate the need for premium limits by (1) establishing a publicly administered fee-for-service plan, with its costs constrained by rate setting, as a strong competitor in the marketplace, and (2) linking the total cost of public subsidies to that plan. An advantage of this concept is that it seeks to avoid interference with both fee-for-service and managed-care approaches; wherever either approach can contain costs and ensure quality, it can expand and prosper. In areas where managed-care plans are infeasible (e.g., rural areas), the fee-for-service plan would be available. In areas where managed-care plans can ensure access to quality care at an affordable cost, they are likely to attract more enrollees.

A second set of competing objectives poses the need to expand coverage and choice for poor and uninsured Americans against the pressure to control federal spending on subsidies that may be required to accomplish that goal. The Commission has indicated that universal coverage is a key component of reform, suggesting that it is a necessary, but not sufficient, condition for ensuring access to health care (see Chapter 9). Although some proposals are

designed to guarantee universal coverage, concerns remain about issues such as limiting cost sharing to appropriate levels and preserving freedom of choice for the poor. The guaranteed availability of a publicly administered fee-for-service plan could make certain that the poor have access to a full range of providers without facing unaffordable costs. The efficiencies that some believe are offered by managed care would be readily available to the poor if such plans are priced competitively with the fee-for-service plan.

A third tension is between structuring markets to enhance consumer choice and doing so in a way that is feasible and not unnecessarily complex. The Commission is concerned that regional alliances would produce an unnecessary layer of bureaucracy, one that would be hard both to hold accountable and to get up and running satisfactorily in a short time. It is also concerned about the ability of state-based alliances to serve the many metropolitan areas that span state borders. A national alliance could potentially perform the functions of structuring a market without creating some 250 separate organizations or splitting natural markets (see Chapter 6). In addition, a single publicly administered fee-for-service plan would eliminate some of the duplication imposed by private fee-for-service plans, each with their own payment rates and utilization review (UR) procedures—thus reducing to some degree the hassle faced by physicians and patients.

Although there are distinct advantages to the concepts being advanced by the Commission, many of the difficult issues that challenge other approaches would not be resolved. First, these concepts, however designed, would be successful in achieving universal coverage only if adequate funds are available to subsidize the care of the poor. Savings from cost containment, new revenues, or a combination must materialize if coverage goals are to be met. Second, risk selection would remain a concern for the national alliance, just as it would for most other proposals that include individual choice of health plans. The magnitude of the problem may vary with some of the choices outlined below, but the general concern is that the fee-for-service plan would be selected disproportionately by the sickest people. If true, effective risk adjusters or risk-sharing mechanisms would be needed to transfer revenues between plans, or more public funds would be required to support the publicly administered plan. Finally, the success of cost containment in a system that uses a national alliance and a public fee-for-service plan would rely heavily, as it would for other approaches, on the responses of health plans and providers to the mix of regulatory and competitive forces.

THE CORE CONCEPTS

The central concepts of a national alliance that offers a choice of health plans and a publicly administered fee-for-service plan as one of those choices have their roots in at least three models. One is the Medicare program, where all eligible individuals are guaranteed access to providers of their choice through the fee-for-service Medicare program. Depending on where they live, some also have the option to join various managed-care plans that provide the Medicare benefit package. The second model is the Federal Employees Health Benefits

Program (FEHBP), which offers all federal employees the option of enrolling in their choice of private fee-for-service and managed-care plans. The third model is the alliance or health plan purchasing cooperative that is a core element of several managed-competition proposals currently before the Congress.

Each of these models alone has merits and flaws, and the national alliance should be designed to select the best features while avoiding some of the problems of each. Medicare's system for offering managed-care plans has been criticized for its failure to address risk selection adequately and for a flawed payment methodology (Brown et al. 1993). FEHBP creates competition over benefit packages, as well as over efficiency, and has a pricing structure that unfairly rewards some plans over others (CRS 1989). Alliances or purchasing cooperatives are a model, not a reality. They have been targeted for criticism not only for their complexity in some variants but also for the risk of relying on an untested mechanism for stimulating a more competitive market (see Chapter 6).

The fee-for-service plan that the Commission envisions is clearly modeled on the Medicare program. Medicare has a strong record of ensuring access for its beneficiaries and has put mechanisms in place over the past decade to control costs. Because Medicare is funded through its own trust funds and has a different benefit structure, the Commission believes that it is important to keep the financing of this new public plan separate from the existing Medicare program. In the future, policymakers might want to consider a convergence of the two programs.

The National Alliance

The national alliance is designed to provide an entry point through which people choose health plans. For many individual and group purchasers, the current market fails to offer affordable insurance options, and the Commission has recommended that some entity be given the responsibility for performing this task (see Chapter 6). Like many large employers or the FEHBP, the national alliance provides a structure through which a range of choices can be offered. In addition, it enforces basic rules of competition and provides consumers with information about their choices. Unlike other structures that have been proposed, the national alliance is intended to accomplish these functions with the least possible interference with the existing system.

Under the national alliance, fee for service would be offered through a single publicly administered plan modeled on the Medicare program. A standard benefit package, probably broader than Medicare's, would be covered under this plan. In general, consumers selecting the fee-for-service plan would be covered for services delivered by any provider of their choice, without the need to select from a limited network of physicians, hospitals, or other providers. As with Medicare, exceptions might be made to the principle of free choice, for example, by insisting that transplants be performed only at certain centers of excellence.

The national alliance would also offer managed-care plans to consumers through an array of privately administered preferred provider organizations (PPOs) and health maintenance organizations (HMOs) in each geographic area. Each plan would be required to cover the standard benefit package. A managed-care plan is generally distinguished from a fee-for-service plan by its contracts with a provider network, but the definition could be narrow or broad. Plans could make various payment arrangements (e.g., salary, capitation, or fee schedules) with their network providers. Managed-care plans would compete among themselves and with the fee-for-service plan over their ability to deliver quality care at a competitive premium. As is now the case, many managed-care plans might be available in some markets; in other areas, choices could be far more limited.

The Commission prefers to prohibit the offering of private fee-for-service plans through the national alliance. The idea of competing fee-for-service plans seems to offer little in the way of expanded choice, since the important choice made by consumers who prefer fee for service is one of providers, not health plans. Multiple fee-for-service plans may in fact increase the administrative complexity or hassle faced by providers who are subjected to an array of utilization review procedures from different plans.[1] This prohibition may not be particularly disruptive, because many insurers that historically offered fee-for-service plans are already beginning to put together PPOs and HMOs. The most recent data show that 51 percent of all employees were enrolled in managed-care plans in 1993, up from 29 percent in 1988, and this trend can be expected to continue (Gabel et al. 1994).

Universal Coverage

The concepts in this chapter could serve as a mechanism for guaranteeing universal coverage by automatically covering anyone not otherwise insured.[2] Individuals participating in the alliance would be guaranteed coverage in the publicly administered fee-for-service plan, but would have the option of selecting among those managed-care plans offered in their area. Significantly, the fee-for-service plan would serve as the default plan for anyone participating in the alliance who does not select a private managed-care plan. This approach could prove an advantage over some current proposals, where the default selection might be the lowest-cost plan. Such a plan could be an HMO that was not convenient or welcoming to a consumer who has difficulty even making a plan selection or one that was not set up to deal with the special needs of those with chronic conditions.

Low-income individuals who are not covered through other mechanisms would be guaranteed coverage in the publicly administered fee-for-service plan, with premiums

[1] Although it would be possible to mandate a single UR protocol, it becomes increasingly difficult to imagine what fee-for-service plans could do to distinguish themselves in the marketplace.

[2] The issue of whether group purchasers would have an option of seeking insurance through the national alliance or through private arrangements is addressed in the next section.

waived or reduced by public subsidies, depending on income. The Commission assumes that current Medicaid beneficiaries, but not Medicare beneficiaries, would be included under this system. Income-related subsidies could be based on the idea of making the fee-for-service plan affordable. In that case, individuals could apply the same dollar amount of the public subsidy toward any available managed-care plan, paying any higher premium amount out of pocket. This credit could be made refundable so that consumers get a rebate if they select a managed-care plan whose premium is lower than the public plan. Cost sharing would also be waived or reduced based on eligibility for premium subsidies (see Chapter 9).

Cost Containment in the Publicly Administered Fee-for-Service Plan

Under the concepts envisioned here, the publicly administered fee-for-service plan is modeled on the Medicare program, and the approach to controlling costs would have its roots in that program. Given the Commission's interests and expertise, this section focuses specifically on the physician sector, but Medicare's provider payment methods would likely be the basis for controlling costs for all categories of health services.

In addition to its record of providing access to eligible beneficiaries, Medicare has achieved a degree of success in gaining control over costs in recent years. Whereas Medicare expenditures grew faster than national health expenditures until 1985, the trend has now reversed. Since the adoption of prospective payment for hospitals and a fee schedule with Volume Performance Standards for physicians, the rate of growth in Medicare spending has fallen below the national rate (CBO 1993).

Physicians would be paid on a fee schedule built on a uniformly applied resource-based relative value scale. The fee schedule would be based on Medicare's, but with appropriate refinements (see Chapter 20). The fee schedule's conversion factor, which translates relative values into dollars, should be set initially so that physicians maintain their current revenue levels. It would be updated through a process of negotiation or consultation with a backup default formula that adjusts for prior-year spending. This default formula would be modeled on the Medicare Volume Performance Standard system, where the conversion factor update is lowered when volume grows faster than the target rate and raised when volume growth is below the target. Balance billing limitations would be imposed consistent with Commission recommendations (see Chapter 4).

To help maintain effective cost containment, the publicly administered fee-for-service plan could incorporate some form of utilization review. Although utilization review can be a key element in controlling costs and reducing inappropriate use of services, the Commission sees many current UR methods as overly punitive and administratively complex mechanisms that create hassle for physicians. New approaches to profiling that stress education over sanctions should take the place of traditional UR approaches. Many private plans have made such changes, and Medicare has set a goal of changing its own review procedures. In Germany, the physician community takes responsibility for profiling, including its use to give feedback to

physicians who appear as outliers. Such approaches should be emphasized in the fee-for-service plan.

UNRESOLVED DESIGN ISSUES

Because the Commission is not constructing a full proposal for reform, there are some critical design issues that it has not attempted to resolve. Should policymakers wish to structure reform around the concepts of a national alliance and a publicly administered fee-for-service plan, two issues would be particularly important. One is whether certain group purchasers would be required to make insurance offerings through the national alliance or whether such participation could be voluntary. A second is how the national alliance itself would be structured.

Voluntary or Mandatory Participation by Employers of Various Sizes

One key issue is whether participation by employers and individuals in the national alliance should be voluntary or mandatory. One option would give all employers the choice of continuing to make their own arrangements with private insurers or placing all their employees in the national alliance.[3] This voluntary approach creates the least interference with existing markets, but it would maximize the likelihood of risk selection. Firms with older employees or those in expensive markets would be the most likely to take advantage of the national alliance, raising both the per capita cost to those participating in it and the cost of public subsidies on behalf of low-income individuals. It might be possible to assess risk-based payments to firms opting for the national alliance, but it would be inconsistent with the goal of community rating to charge higher premiums to their employees.

With the mandatory option, all employers under some threshold number of employees would be required to participate in the national alliance. This requirement could be linked to an employer mandate to help pay the cost of coverage, but such a linkage would not be necessary. Larger employers could continue to make their own arrangements for insurance, or they in turn could be offered the option of going through the national alliance by paying a risk-based assessment. Similarly, individuals lacking access to employer-based coverage could be required to participate in the national alliance.

An additional variation could require or allow employers that do not participate in the national alliance to offer their employees the option of the publicly administered fee-for-service plan instead of private fee-for-service plans. On the one hand, such a requirement could ensure that everyone has a fee-for-service option. It would also be consistent with the Commission's concern that competing fee-for-service plans create complexity for providers

[3] The Commission assumes that insurance reforms would be enacted for the private market.

rather than expand choice. On the other hand, it would restrict the flexibility large employers have in designing their insurance options.

The Structure and Roles of the National Alliance

The national alliance could be designed in several different ways.[4] Regardless of the design, it would provide the basic framework necessary for structuring markets for health services, administered on a national rather than a regional basis. Given that a substantial insurance market may continue outside the national alliance, insurance reforms would be an important complement to this new entity. Roles of the national alliance could include collecting and pooling employer premium payments, consumer premium payments, and public subsidies; making risk-adjusted payments to plans; administering annual open seasons; preparing quality performance reports to compare plans; and ensuring that managed-care plans follow basic rules for quality and marketing.

Some functions could be handled on a centralized basis for efficiency reasons, much like the Federal Employees Health Benefits Program makes a menu of plans available to federal workers all over the country. Other functions could be handled on a regional basis, much like Medicare claims processing is administered by regional carriers or like federal taxes are collected by Internal Revenue Service regional offices. As in Medicare, various functions could be contracted out to private companies that would compete for such contracts in different geographic areas.

The national alliance itself could be structured as a public agency, in the same way that the Health Care Financing Administration runs Medicare. Some would view this option with alarm, since it appears to create a powerful new government bureaucracy. But, to the extent that its roles are primarily administrative, this model may be quite appropriate. Alternatively, the national alliance could be structured as an independent agency like the Federal Reserve. This model allows a greater degree of independence in day-to-day decisions and greater flexibility in contracting and hiring decisions. There are also some interesting parallels. Like the Federal Reserve, a national alliance would oversee a flow of premium dollars and could be financed by a percentage charge off that dollar flow. The fact that the system would not require appropriated federal funds could be the basis for its independence.

MERGING CORE CONCEPTS WITH DIFFERENT REFORM APPROACHES

This section illustrates some of the choices for merging the concepts of a national alliance and a single publicly administered fee-for-service plan with ideas from various other reform proposals currently before the Congress. The Commission sees these concepts as compatible

[4] The structure of the national alliance could be distinct from that of the fee-for-service plan, which might rely on some of the existing structures used by Medicare.

with many of these proposals. This chapter does not attempt to describe the fit with each proposal individually; rather, it describes how several key policy choices could be accommodated. In some cases, the discussion indicates how Commission recommendations from other chapters would be relevant; alternative decisions might fit equally well.

Tax or Premium Financing, Employer or Individual Mandates

The national alliance is compatible with a variety of choices on financing and on employer and individual mandates, issues that are at the crux of the political debate and for which the Commission has no particular basis to make recommendations. For example, premium-based financing could look very much like the Administration's system of employer and family contributions, with public subsidies for low-income individuals, small employers, and low-wage employers. If an employer mandate were incorporated, employer and individual contributions could be based on the fee-for-service plan's premium.

The national alliance could also be combined with the individual mandate that is a feature of the Chafee-Thomas bill, which envisions a mix of employer and individual financing, or the Nickles-Stearns bill, where employers would be required to cash out their current insurance contributions and individuals would be responsible for purchasing coverage. Alternatively, tax-based financing with no additional premiums paid by individuals could be incorporated along the lines of the McDermott-Wellstone proposal.

Cost Containment and Expenditure Limits

The national alliance is also compatible with different approaches to cost containment. Costs in the public plan would be constrained by a fee schedule combined with a Volume Performance Standard, low administrative costs, and efficiencies of scale. The more difficult question is how total system costs would be addressed.

For the managed-care sector, there appear to be several approaches for cost containment. Expenditure limits could be applied on a systemwide basis to guarantee that spending growth is constrained, as in the Administration's proposal. Alternatively, cost containment could be left to market pressures in the more competitive market that might result from reform, as proposed in the Cooper-Breaux or Chafee-Thomas bills.

The Commission generally prefers to combine these approaches. For example, the system described in this chapter might lessen the need for premium limits because the need for public dollars would be based on the cost of the publicly administered plan. In addition, managed-care plans would have to compete with the publicly administered fee-for-service plan's premium. Standby premium limits could be enacted to take effect in the event that market pressures failed to be effective and spending continued to grow. The mere threat of standby premium limits could have a salutary effect on plans' efforts to control costs (see Chapters 2 and 3).

Community Rating and Risk Adjustment

The national alliance could be designed with full community rating, as in the Administration's proposal, where plans charge the same premium to everyone in a defined geographic area. Alternatively, some form of risk rating could be permitted. For example, premiums could vary by age, as in the Cooper-Breaux bill, or by age, sex, and geography, as in the Nickles-Stearns bill. Under community rating or a modified version, risk adjustment ensures that plans are not unduly rewarded or penalized by risk selection. As noted earlier, the rules for employer participation may affect the importance of these choices.

The recommendations made by the Commission elsewhere in this report provide one example of how these principles might be incorporated (see Chapters 7 and 8). Premiums paid by consumers and payments received by plans would be based on a concept of community rating areas (CRAs). CRAs would include undivided metropolitan statistical areas without regard to state boundaries. Consumer premiums would vary based on local input prices but not on risk factors, whereas payments to plans would be adjusted to account for risk.

All managed-care plans would determine which CRAs they wished to serve and would be available to all consumers in those areas at community-rated premiums (other than variations for individual and family coverage). The publicly administered fee-for-service plan's premium would be community rated so that consumers would pay premiums that would vary only on the basis of local input prices. During a phase-in period, the fee-for-service plan's premium would need to incorporate historical spending levels for each CRA to avoid giving it an unfair advantage or disadvantage in competing with local managed-care plans.

Both managed-care plans and the fee-for-service plan would receive risk-adjusted payments based on the age or health status of their enrollees. Thus, if a private managed-care plan drew enrollees who were younger or healthier, it would receive reduced payments. If the public plan drew older or sicker enrollees, it would receive an additional share of total premium revenues.

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PART II

REFORMING THE HEALTH SYSTEM:

COMPLEMENTARY POLICIES

CHAPTER 12

COVERAGE DECISIONS AND TECHNOLOGY ASSESSMENT

The use of new technologies and treatments is an important contributor to the rise in national health spending. Although these can confer substantial clinical benefits, there is concern that they are often adopted widely without sufficient knowledge about their benefits and risks for specific clinical indications. Not all new services prove to be beneficial; even those that are advantageous for some indications when initially evaluated can be used in circumstances where patients do not gain. Patients' outcomes would be improved and health spending increases could be moderated if the use of new services were confined to those instances where they improve patients' health. The challenge is how to make such determinations without restricting the adoption of worthwhile new technologies and treatments.

Information is needed about the risks, benefits, and costs of a new technology or treatment under ideal and actual practice conditions in order to conduct a comprehensive technology assessment. Such an assessment integrates these data with others to predict the likely consequences for individuals and health care systems. Patients and practitioners should use the results in making decisions about individual treatments, and health plans should base coverage decisions—whether a particular service will be paid for or provided—on this information. The demand for sound evidence of the effectiveness and cost of new technologies and services is likely to grow under health system reform. Increased competition, greater use of capitated payment, and closer monitoring of health outcomes will sharpen the incentives for health plans and practitioners to provide the most efficacious, cost-effective care possible.

Coverage decisions by health plans are an important point of control over the introduction and dissemination of new technologies and treatments. The Commission has formulated recommendations to improve how coverage decisions are made and how technology assessment should be funded. In the coming year, ongoing work in this area will emphasize ways to evaluate costs in coverage decisions and how to facilitate studies of the effectiveness of widely used technologies and treatments.

RECOMMENDATIONS

A national entity should decide for all health plans whether selected major new technologies and treatments are covered for particular indications. National coverage decisions should be made for only a limited number of new technologies and treatments; criteria should be developed for when such decisions are warranted.

In the absence of a national decision, coverage decisions should be made by health plans based on critical appraisal of available data. The national entity should maintain a list of services and indications it has considered for which safety and efficacy have not been sufficiently established to warrant inclusion in a standard benefit package. Health plans may still cover these services but should not be required to do so. Disagreements between health plans and patients or providers about coverage decisions should be referred to an administrative or alternative dispute resolution system.

For selected covered services, the national entity could restrict coverage to settings in which the effectiveness of the service is being formally evaluated. Health plans should pay the full clinical costs of these covered services.

A federal body should set priorities for, coordinate, and conduct technology assessments in a timely manner for use by the national coverage decision entity and health plans. Federal funding should be increased for technology assessment and health services and evaluative research. When evidence of the safety and efficacy of an experimental technology or treatment is not yet sufficient to warrant coverage, plans generally should still contribute the cost of standard therapy toward the evaluation of the technology or treatment in approved research studies.

Socially acceptable methods need to be developed to consider costs along with benefits in coverage decisions.

The chapter begins by analyzing how coverage decisions are made now and how they could be improved. A case is then made that a national entity should make a limited number of coverage decisions to apply nationwide. The last section describes how technology assessment and evaluative research should be funded and improved.

CURRENT METHODS FOR MAKING COVERAGE DECISIONS

Health plans (payers) determine whether and at what point in the development and diffusion of a new medical technology or treatment to pay for or provide it.[1] The information, processes, and criteria that are used for coverage decisions vary markedly. Some plans will pay virtually any claim that is submitted; the most demanding conduct a formal process using independent experts to determine whether there is good evidence that a technology or service is safe and effective. Coverage decisions are ultimately made by the courts when coverage

[1] The decision by a third-party payer (or employer, when it has assumed this role) not to pay for a particular service and indication is equivalent to the decision by a health maintenance organization not to provide that service; this chapter uses the term, "coverage decision," to refer to both.

denials by health plans are challenged. This section explores these topics and suggests how coverage decisions could be improved.

Criteria for Coverage

Coverage decisions can be based on criteria that include safety, efficacy (defined as net benefits achieved under ideal conditions), and effectiveness (defined as net benefits when used in community practice). Additional possible criteria are cost effectiveness (compared with alternatives for that clinical indication) and a cost-benefit ratio commensurate with that of other services (i.e., scarce health care dollars are worth allocating to it).

Most health plans require evidence of safety and efficacy. Some require Food and Drug Administration approval of a drug or device for the specific indications under consideration. Blue Cross Blue Shield (BCBS) plans are among those that also require some likelihood of effectiveness in community practice. A formulation commonly used by BCBS is that a new technology must meet all of the following criteria to be covered:

- The technology must have final approval from the appropriate government regulatory bodies.
- The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes.
- The technology must improve the net health outcome.
- The technology must be as beneficial as any established alternatives.
- The improvement must be attainable outside of investigational settings.

Most BCBS plans consider technologies that do not meet these criteria to be investigational and, therefore, excluded from coverage (Gleeson 1993).

Quantifiable criteria and objective thresholds for making coverage decisions do not exist, and the level of certainty required to satisfy each criterion adds further subjectivity. All coverage criteria, no matter how explicit, require making considered, expert judgments. How much and what type of scientific evidence are needed? How much must the net health outcome be improved, and are some outcomes weighted differently than others? What kind of evidence or reasoning is needed to predict effectiveness outside of investigational settings? How certain must these conclusions be? BCBS provides its decisionmakers with guidelines to help answer these questions, but payers may differ in their interpretation of coverage criteria and will not necessarily reach the same conclusions at any point.

Medicare's coverage decisions are made primarily by its fiscal intermediaries and carriers. They use professional acceptance as the primary criterion for making coverage decisions, although many explicitly or implicitly consider evidence of safety and effectiveness. Formally, the Health Care Financing Administration (HCFA) deems a medical service eligible for Medicare coverage only if the service is reasonable and necessary for the diagnosis or treatment of illness or injury according to the following criteria:

- The service is safe and effective.
- The service is not experimental or investigational.
- The service is appropriate (i.e., furnished in a setting commensurate with the patient's medical needs and by qualified personnel) (HCFA 1989).

Decisions about whether a new technology or treatment is experimental should be more objective and consistent. A classification scheme could be developed to categorize the level of evidence available about the safety, efficacy, effectiveness, and cost of a service (Anderson et al. 1993). If more precise definitions were available, coverage might be more reliably limited to particular categories of services or certain clinical indications.

The Role of Costs. Expenditures on new technologies and services are an important contributor to the rise in national health care spending (Newhouse 1993). Much of this spending may be worthwhile for the benefits received. As the use of a new procedure or technology spreads, however, it often becomes employed for patients who gain less from it than those for whom its efficacy was initially established. Because health care dollars are limited, at some point the benefits are too small to justify their cost. The nation cannot afford to pay for expensive new technologies and procedures when their utility is at best marginal.

Health plans and physicians now consider the costs of care implicitly and explicitly in numerous ways, but the ethical ramifications of these practices have not been well defined. Difficult issues are raised when physicians consider costs in individual patient care decisions. Physicians may experience ethical conflicts if they are responsible both for maximizing their patients' clinical well-being and for saving money. An individual patient's decisionmaking may also be skewed because the patient ordinarily receives the benefits of a proposed technology or treatment without bearing much of its cost. Even practice guidelines that are based objectively on evidence of efficacy often implicitly consider costs. Guidelines for screening, for example, necessarily incorporate trade-offs between the benefits and cost of more frequent screening.[2]

[2] In recognition of this, the Board of Science Advisors to the National Cancer Institute recently concluded that the Institute should provide information about the benefits and costs of different breast cancer screening schedules, but it should not issue guidelines that recommend any particular schedule because it had no expertise or mandate to weigh costs against benefits (Kolata 1993).

Coverage decisions might provide a more acceptable forum in which to consider costs explicitly, but a consensus on methods to factor costs into coverage decisions does not yet exist. One approach is Oregon's method of rank-ordering services and indications in order to determine Medicaid coverage. Another is to fashion an explicit cost-effectiveness criterion for coverage decisions. According to one formulation, one service is more cost effective than its counterpart if it is (1) less costly and at least as effective; (2) more effective and more costly, but the additional benefit is worth the added expense; or (3) less effective and less costly, but the greater benefit of the alternative strategy is not worth the added expense (Doubilet et al. 1986). HCFA in 1989 proposed a similar cost-effectiveness criterion for Medicare, but the regulation aroused controversy and was never finalized (HCFA 1989). Health plans generally have not used an explicit cost-effectiveness criterion to date. Although there is not yet universal agreement about how to apply cost-effectiveness and cost-benefit analyses, other governments (for example, Australia and Ontario) have developed guidelines for economic analysis of services such as pharmaceuticals. Economic analysis is increasingly being used, particularly in circumstances where a government payer desires to allocate health care funds efficiently. The British National Health Service, for example, has established its Health Technology Assessment Programme to provide information on the effectiveness and cost-effectiveness of new and existing medical interventions (Cooke 1994).

The methods by which costs are measured and compared with benefits need to be refined, and publicly acceptable mechanisms for considering costs in coverage decisions need to be developed. In the coming year, the Commission plans to explore how the consideration of costs in coverage decisions might be advanced.

Processes for Making Coverage Decisions

Coverage decisions require determining whether the coverage criteria are satisfied by the available evidence. Evidence from primary or secondary data analyses must be gathered and synthesized in a technology assessment.

Limitations in Primary Data on which to Base Technology Assessments. The limiting factor for good coverage decisions today is the lack of high-quality information on which to base them. Because health plans generally do not gather primary data to use in technology assessments, the assessments they perform depend heavily on the evidence available. They typically find that few, if any, relevant rigorous studies have been done (Gleeson 1994). The early studies of the safety and efficacy of a technology or treatment often have methodological flaws and compromises that undermine their usefulness to rigorous technology assessment. This is due in part to the use of methodologies and intermediate outcomes variables that enable results to be obtained quickly, the difficulty and expense of doing good comparative studies, and the incentives of those funding and conducting the research.

The incentives provided by fee-for-service payment make new technologies and treatments profit centers rather than cost centers for physicians. When the early studies of the efficacy of

new technologies or procedures are positive, their diffusion throughout the health care system is rapid, and their use is extended to new indications and types of patients. As a result, the use of new services often outpaces good knowledge about their actual net benefits to patients' health. When their effectiveness in community practice can be reliably predicted from the nature of the technology or treatment and the studies of their efficacy, this is not problematic. But in many cases, effectiveness in general use may not be so certain. This can be because special expertise, equipment, or conditions are necessary to secure the benefits of the service, or it may be applied to different types of patients and clinical indications than those for which its benefits have been demonstrated. No formal mechanism exists to restrain the diffusion of such a technology or treatment until knowledge of effectiveness is gained or, alternatively, to ensure that information on effectiveness is obtained as the service is provided in the community.

Too few studies are performed of new technologies' and treatments' effectiveness after they have undergone widespread dissemination. Once coverage of a product is approved, the manufacturer has little incentive to evaluate whether the product is effective in community practice because earlier efficacy studies might not be supported. Furthermore, health plans and government agencies have not devoted sufficient funds to such studies. Even when evidence of effectiveness or cost effectiveness is not favorable for a broad group of patients and clinical indications, it may be particularly useful to determine whether the service is effective or cost effective for subsets of individuals or indications.

A combined public and private model to rectify the lack of primary clinical information needed to inform coverage decisions was recently proposed by a coalition of third-party payer organizations, including the Blue Cross Blue Shield Association (BCBSA), the Group Health Association of America, and the Health Insurance Association of America. The coalition members sought to contribute funds to the Agency for Health Care Policy and Research (AHCPR) in an effort to expand its research agenda, prioritize technology assessment efforts, and disseminate its findings to health plans, practitioners, and the public. Substantial opposition to the initiative prevented it from reaching fruition.

Another model for improving the primary data available for technology assessment is provided by a BCBS demonstration project on breast cancer treatment. BCBS is funding a significant portion of the patient care costs associated with a randomized clinical trial to evaluate high-dose chemotherapy with autologous bone marrow transplant support. This gives patients an opportunity to receive an often requested treatment (albeit in a randomized trial) while ultimately producing information about the treatment's effectiveness. The funding for the demonstration is separate and distinct from the patients' ordinary health insurance. In this way, individual member plans make clear that they classify the treatment as investigational, while they enable patients to seek this treatment by participating in the randomized trial (Gleeson 1993). This approach raises the broader question, addressed in the last section of this chapter, of the appropriate allocation of responsibility for funding of clinical research among private industry, health plans, and the federal government.

Performance of Technology Assessments by Health Plans. High-quality technology assessments are rarely available off the shelf to health plans. Health plans that do not have the resources to conduct formal technology assessments must rely on the explicit or implicit judgments of safety and efficacy made by other payers or by the physician and academic communities. For such plans, acceptance of a service by providers or other health plans can be a powerful determinant of coverage decisions.

Larger health plans have the resources to conduct their own more rigorous technology assessments, sometimes called technology reviews. A panel of reviewers typically is assembled that may include representatives of particular physician specialty groups and medical researchers without financial ties to the plan. The panel reviews the relevant literature and discusses any related clinical research findings. Individual experts on the treatment or technology and possibly a representative of the manufacturer or innovator may be asked to provide additional expertise and data.

Plans that belong to a larger national or regional network can use in their own coverage decisions the technology assessments provided or sponsored by the network. Typically the network sponsor can devote greater resources to the assessment process than can individual plans, and the consolidation of effort enables member plans to avoid unnecessary duplication. Such assessments generally focus on reviewing the available information on safety, efficacy, and effectiveness, leaving the actual coverage decisions to the individual plans.

The BCBSA exemplifies the advantages offered by having technology assessments performed by a network on behalf of individual plans. The individual member plans make their own coverage decisions using processes and criteria they set themselves. Technology assessment information is provided to member plans by the BCBSA Technology Evaluation (TEC) program, which examines and synthesizes the existing scientific evidence to determine the safety and efficacy of new medical technologies and treatments. The TEC program has performed more than 200 assessments since its creation in 1984.

The BCBSA recently formed a partnership with Kaiser Permanente, which will double the TEC program's output. Other interested parties can receive the assessments by subscription. The information will also be made available to help guide physicians' and patients' medical decisions, provide a starting point for the development of practice guidelines, and reduce duplication in research.

Managed-care organizations face the same coverage pressures and considerations as indemnity insurers.[3] As described above, Kaiser Permanente has joined with the BCBSA to

[3] The principal difference is that physicians in group- or staff-model health maintenance organizations are more likely to work within the organization itself to influence coverage policies, while individual fee-for-service practitioners are not formally connected with third-party indemnity insurers. Demands to provide a particular service to a patient are more likely to come from the patient in health maintenance organizations and from the physician and patient together in indemnity insurance.

produce technology assessments, but Kaiser Permanente then makes its own coverage decisions. The Group Health Cooperative of Puget Sound uses a committee that includes two consumer representatives to make recommendations to the governing board on coverage decisions. In formulating a recommendation, the committee rates services on 18 dimensions, including effectiveness, cost, marketing, and consumer and provider satisfaction.

Medicare coverage decisions are generally made by its carriers and fiscal intermediaries. As a result, what is covered varies considerably (Roe et al. 1987). HCFA's Bureau of Policy Development decides whether a national coverage decision is needed, based on criteria such as medical and national significance, inconsistency in coverage decisions among carriers and fiscal intermediaries, potential for high cost or rapid diffusion, and disagreement among experts about safety and effectiveness. An opinion is sought from an advisory panel of physicians, and a formal technology assessment may be obtained from the Office of Health Technology Assessment (OHTA) within AHCPR. HCFA then makes a coverage decision using formal rulemaking procedures. Some 10 to 20 national coverage decisions are made for Medicare each year.

Avenues of Improvement. The quality, quantity, and timeliness of information available to payers making coverage decisions need to be improved. This may require increasing the incentives for private industry to produce good primary data for technology assessment. The role of government and health plans in sponsoring primary research and technology assessments is explored in detail in the last section of this chapter. Better coordination of clinical research and technology assessments could prevent much duplication of effort and ensure more complete availability of needed information.

It is important for all health plans to base their coverage decisions on high-quality technology assessments. Plans without substantial resources for technology assessment may now be overly dependent on the acceptance of the technology by providers that may not require rigorous evidence of effectiveness to adopt the technology. The decentralization of coverage decisions affords many opportunities for manufacturers and providers to obtain favorable decisions. Once coverage has been permitted by some payers, it becomes more difficult for others to deny it. To prevent this from occurring, all health plans need access to good technology assessments. The availability of technology assessments by subscription from the BCBSA/Kaiser Permanente collaboration is a positive development; perhaps other consortia will form to broaden the availability of high-quality technology assessments. The federally provided technology assessments that would be required by the national coverage decision entity recommended by the Commission would also be available for use by health plans. As discussed later in this chapter, the Commission recommends that federal spending for technology assessments be increased; these assessments would be available for health plans to use. Formal, unbiased, evidence-based processes for making coverage decisions should be used by all health plans.

Legal Review of Coverage Decisions

The courts are the ultimate arbiter of coverage decisions. They decide formal challenges to coverage denials, but all coverage decisions are made in the shadow of what it is anticipated that the legal system would decide (Boren 1994). Often these suits are decided in favor of the patient, and the plan is required to pay for or provide the procedure or technology (Ferguson 1993). Sometimes the threat of legal challenge is sufficient (or necessary) to obtain a favorable coverage decision (Peters and Rogers 1994).

Insurance contracts typically are written to provide coverage for all "medically necessary" services falling within specific benefits categories, but they usually exclude from coverage procedures or technologies that are experimental or investigational. When faced with desperately ill patients suing for treatment recommended by their physicians, however, courts have often mandated coverage for treatment that seemed clearly to fall within the experimental exclusion. In one case, for example, a court ordered an insurer to pay for a bone marrow transplant in a patient with human immunodeficiency virus infection, even though the treating physician was the only one in the country who had attempted this therapy (Anderson et al. 1993). In another case, a court relied on a technicality (the contract excluded "experimental" treatment but the insurer had determined the procedure was "investigational") in order to mandate coverage (Herrington 1993).

Health plans can take at least three approaches to excluding experimental therapies. First, a list of specific procedures and indications that are not covered can be appended to the insurance contract each year. Courts have tended to view such lists with disapproval, holding that general descriptions of technologies or treatments are too vague while specific descriptions are not sufficiently comprehensible to lay persons. All-or-none decisions may be the most clear, but lists of clinical indications can be lengthy and detailed. Although some consumers might welcome access to detailed descriptions of what health plans do and do not cover, as a practical matter the majority of consumers are not likely to be able to make effective use of such information. Nevertheless, lists of specific exclusions could play a useful role, provided courts support their use.

A second possibility is for health plans to determine themselves what is experimental based on an evaluation of the evidence on the safety and effectiveness of the service. Some courts have faulted this approach because of the lack of objective criteria for what is safe and effective enough to be covered and because payers are thought to have a conflict of interest in making this determination. These objections could be overcome if more specific criteria could be applied and if objective processes that include independent experts are used for coverage decisions.

A third approach is for payers to determine if the service is generally regarded as experimental by researchers, clinicians, institutions, and government regulators. This permits consideration of such information as whether institutional review boards believe it ethical to

randomize patients to the treatment and whether the service has received final approval from regulatory bodies as safe and effective for particular indications. This approach defers the determination of safety and effectiveness to the judgments and actions of external experts and organizations, but it appears to have had some success in the courts.

Payers continue to try to improve contractual language and coverage decision processes so that appropriate coverage decisions will stand up in court. One suggestion is that plans not only determine the efficacy and effectiveness of a service for a group of patients but also consider the potential benefit of the service in the unique circumstances of each patient. Aetna, for example, has established a framework for making coverage decisions on the appropriate use and cost of new drugs, devices, and procedures that affect terminally ill patients. Aetna's policy is to give serious coverage consideration to any experimental regimen that has reached the Phase III level of a National Cancer Institute trial (to determine the efficacy of a treatment). Those that have not reached that level of testing are referred to an outside panel for review. The panel is composed of selected oncologists who are asked to determine whether the treatment in question appears promising and whether it is likely to be effective for the individual patient whose case history is provided. Aetna makes the final coverage decision based on the panel members' individual responses. In the program's first 20 months, only 2 coverage denials out of 43 were challenged in court (coverage was granted in both cases) (Harbaugh 1993).

Policy Options to Improve the Legal Review of Coverage Decisions. Both courts and health plans seem to be becoming more sophisticated about how to write and interpret contractual language relating to coverage for services of unproven efficacy, but considerable progress still needs to be made. The risk of legal liability—emphasized by a recent $89 million verdict for denial of coverage—is causing health plans increasingly to pay for treatment they consider experimental (Anders 1994). At the moment, the debate is over the exclusion of services not yet proven efficacious; the question of the legitimate use of cost considerations has not even been broached. Substantial progress could be made, however, if reasonable decisions based on safety and efficacy alone were supported by the legal system.

Coverage decisions might be better respected by the courts if the processes by which health plans make these decisions were raised to a consistent, rigorous level. Informal or biased decisionmaking processes should be replaced by the more objective, formal processes that many health plans now use. The terms of coverage should be defined more precisely, as discussed earlier. The federal government should support the work needed to improve the classification of technologies.

Two additional approaches should be furthered by federal policy. The first is to remove coverage decision controversies from the courts by requiring that they be referred to an alternative dispute resolution system. Experienced arbitrators or administrative panels should be able to review coverage decisions more objectively than juries and even judges, who are not well versed in scientific methods and evidence and may be unduly swayed by the

emotional appeal of a critically ill patient. Courts should give substantial weight to the conclusions reached by appropriate alternative dispute resolution systems.

Another option is for a national entity to make coverage decisions for selected new technologies and procedures. Most of the important, difficult coverage decisions—at least those that receive legal challenges—seem to involve a relatively small number of services. A national entity could make decisions on these services that could be relied on by health plans (if not binding on them), so that health plans could avoid challenges to the coverage decision itself.[4] This option is the subject of the next section of this chapter.

A PROPOSAL FOR NATIONAL COVERAGE DECISIONS

The Commission recommends that a national entity be created to make the most important coverage decisions. The number of such decisions should be limited, and criteria should be developed for when they are warranted. In the absence of a national decision, health plans should make coverage decisions based on critical appraisal of available data.

The national entity should maintain a list of services and indications it has considered for which safety and efficacy have not been sufficiently established to warrant inclusion in the national standard benefits package. Health plans, including government payers, may still cover these services but should not be required to do so. This would protect health plans from legal challenges to coverage decisions that in the past have produced inconsistent and problematic results. Failure to cover or provide these services should be protected from malpractice actions as well.

For selected technologies and treatments, coverage could be restricted to settings in which their effectiveness is being formally evaluated. This would provide coverage for these services while ensuring that they do not enter widespread, uncontrolled use without knowledge of their effectiveness in practice.

The Need for National Coverage Decisions

Several related reasons converge to support the need for national coverage decisions. Greater consistency in coverage among health plans is needed; this would be essential for the establishment of a standard benefit package for all health plans. A formal mechanism is needed to ensure that the effectiveness of certain new services in community practice is evaluated and to restrain their dissemination during this evaluation. The quality of the decisions and the efficiency with which they are made would be improved by national coverage decisions, and the decisions would be made in more appropriate forums than the courts.

[4] In some instances, patients may still challenge health plans on whether the coverage decision applies to their particular circumstances.

Consistency. The most important justification for national coverage decisions is the need for coverage of major new technologies and treatments to be consistent across the country. It is clear that current methods of making coverage decisions produce inconsistent results (Peters and Rogers 1994). These inconsistencies result from a combination of factors, including differences among plans in coverage criteria and thresholds for satisfying them. The imprecision of criteria for coverage decisions and the uncertainty of the available evidence on efficacy are also contributors. There will always be uncertainty about the benefits of a service in subgroups of the patients included in studies in addition to uncertainty concerning the types of patients and clinical indications not rigorously studied. The unpredictability of legal review of coverage decisions is a final factor that can produce inconsistent results.

If a standard benefit package were to be established as part of health system reform, some national coverage decisions would be essential. Managed-competition advocates favor uniform benefits so that competition will occur on dimensions of price and quality rather than levels of benefits (Straub 1993). Consumers could more easily compare the price and quality of health plans if there were a level playing field in terms of benefits. Even reform proposals that do not rely on managed competition would require a minimum package of health benefits that payers would be required to offer.

It is not clear how much uniformity in services is possible or desirable among plans. It should be recognized that the amount of standardization of benefits that can be achieved is limited. Benefit packages are typically described in terms of broad categories of services, such as inpatient services, prescription drug services, or hospice services.[5] The actual care given—such as the approach to care used for any given clinical situation, the thresholds for medical intervention, the frequency of visits, the types of practitioners seen, and the clinical settings and equipment used—will vary considerably among health plans in ways that cannot be well described by plans or appreciated by consumers.

Although complete uniformity cannot be attained or even approached, national coverage decisions would make the provision of some important, salient technologies and treatments more uniform among plans. A standard benefit package presupposes at least this much consistency. The existence of such a standard benefit package would not preclude plans from offering additional services for an extra premium. For an additional 1.5 percent in premiums, for example, one health maintenance organization offers a plan that includes coverage for experimental new treatments that are specifically excluded from the basic plan (Anders 1994).

Even in the absence of a standard benefit package, there are strong reasons for some coverage decisions to be consistent. The most important coverage decisions for patients, providers, or plans should not depend on the happenstance of which particular health plan, employer, judge,

[5] A few specific coverage decisions can also be written into benefit packages, such as particular schedules for vaccinations or screening mammograms.

or jury is empowered to make the judgment. National decisions would ensure that all persons have access to important beneficial services when warranted and that health plans are not forced to provide expensive technologies or treatments whose benefits have not yet been established. Criteria would have to be developed for when the need for more consistency would justify a national coverage decision. One indication might be if individual health plans reached inconsistent decisions or if a number of health plans had difficulty making particular decisions or defending them in court. Uniformity might be indicated if substantial numbers of enrollees switched plans solely to obtain a particular treatment or technology. More uniform coverage might be most useful for services of potentially high aggregate cost or benefit, particularly when no good alternatives exist. When comparable alternatives exist, however, it would be desirable for managed-care plans to be able to offer whichever they are best able to provide.

Restricting Coverage Until Effectiveness Is Determined. A national coverage entity should create a new category of coverage that would restrict the use of a selected new technology or treatment to settings in which its effectiveness is being formally evaluated. This restriction could mean that the service could be performed anywhere, as long as data on benefits and complications are reported in accordance with a standard protocol; alternatively, coverage could be restricted to particular locations such as centers of evaluation. Certain new technologies and procedures would therefore progress through three stages of coverage. When they are experimental and their efficacy is being tested in initial research studies, they would not be covered. Once efficacy has been established, coverage would be restricted until their effectiveness in more general use is established. Unrestricted coverage would then be authorized for the indications for which the service is beneficial in community practice.

Several circumstances could warrant restrictive coverage. Its principal use would be for new technologies and treatments shown to be efficacious for particular patients and indications, but for which the benefits might be uncertain for other types of patients and indications. As the use of the technology or treatment diffuses throughout the health care system, it would be vital to determine benefits and risks of the procedure for the patients and indications for which it is actually used. Data to evaluate the effectiveness of the service in community practice should be reported and analyzed to determine the appropriate indications for its use.

The experience with technologies and treatments in widespread use may also need to monitored when they require specialized expertise, equipment, or other support to be effective. Those providing such services should be required to report data on effectiveness and complications. Providers with inferior results would be identified so that their use of the technology or treatment could be improved or curtailed. A stricter requirement would be to limit the delivery of these services to settings in which certain prerequisites are available. External quality systems, rather than a coverage decision entity, however, should probably establish the prerequisites for using the treatment or performing the procedure.

A third situation that might warrant restricted coverage is when it is thought that a particular experimental therapy should be covered by health plans, even though the evidence supporting it has not met the usual threshold for coverage. The criteria of safety and efficacy might be relaxed for therapies of unusually high promise or in situations in which there are no effective treatments. Many of the most difficult situations occur in the circumstances of a terminal disease that has no cure, such as metastatic breast cancer or AIDS. The cost of paying for possibly ineffective or harmful treatments must be balanced against the understandable desire of patients for a hope of effective treatment. The question is, when should experimental therapy be included in the standard benefit package for which all persons must pay? It is possible that the public would be willing to pay the additional premiums required for some experimental therapy to be available to patients in these circumstances. The national coverage entity must weigh these considerations in determining the standard benefit package.

It would be best for such treatment to be required to be given in a randomized clinical trial in order to gain insight into its safety and effectiveness. Many terminally ill patients would want the treatment, however, instead of only a random chance of receiving it. This is termed compassionate use of a therapy. Such open use of an investigational therapy has been defended on humanitarian grounds, but it involves a clear trade-off in learning about the effectiveness of the treatment (Stolley 1993). Either way, however, the results of treatment need to be monitored and reported.

It would be desirable for an infrastructure to be created to facilitate the evaluation of new services' effectiveness in community practice. This would help engage practitioners in evaluating the services they provide and would create an increase in the number and quality of studies of effectiveness, including studies of comparative effectiveness, that could be done. So-called centers of evaluation have been proposed that would lead the evaluation of technologies and services. In the coming year, the Commission plans to explore options for creating an infrastructure to promote evaluative studies.

Other Advantages. National coverage decisions would potentially be more efficient because they would replace the myriad of individual decisions made by health plans. The quality of the decisions should be better than those made by some health plans or employers because the national entity should have the resources, expertise, and processes to make good decisions. Decisions made on a national basis would better protect health plans from legal challenges to controversial coverage decisions. The national coverage entity could also help guide clinical research and technology assessment activities. It should help set priorities for evaluative research and technology assessment for the federal bodies and others that fund or conduct these activities.

Potential Disadvantages of National Coverage Decisions

A national coverage decision system must be designed to minimize several potential dangers. The national entity's decisions might become politicized, despite efforts to insulate the decisionmakers from political pressures. Although overall accountability of the national

coverage decision entity to the public must be maintained, it would be undesirable for interest groups to be able to exert political pressures to influence any particular national coverage decision. The structure and functioning of the national entity must strike a balance between these considerations.

Some fear that significant delays would inhibit research and development and postpone the use of services that would benefit the public. The national entity must be given adequate resources and access to technology assessments to perform its functions in a timely manner. The harms of delays would be minimized by the fact that individual health plans would have to continue making coverage decisions as they do now; they would not be permitted to wait for the national entity to act.

Manufacturers and researchers generally oppose the idea of a single entity—especially a governmental one—making decisions that could determine the success or failure of their products. They argue that the incentives for developing a new technology would be adversely affected. Although erroneous national decisions could have larger consequences than mistakes of individual health plans, any errors would be more likely to allow than deny access to services. Health plans would still be permitted to cover services the national entity had yet to deem safe and efficacious. The only type of mistake not directly correctable by health plans would be if they are required to cover services that may not prove efficacious. The alternative—the completely decentralized system that now operates—requires high-quality decisionmaking throughout. The whole system can be undermined if favorable coverage decisions can be obtained in some places with processes and standards that are less rigorous than desirable.

Ensuring the Availability of Needed Technology Assessments

The national entity will need high-quality assessments of major new technologies and treatments. Some part of the federal government must meet this need by obtaining or conducting these assessments. This body should also provide input on clinical research priorities for HCFA, AHCPR, the National Institutes of Health, and others to supply the data needed for making technology assessments.

Today's technology assessment system is highly decentralized. Even though this pluralism may foster greater creativity, this strength could be overwhelmed by inefficiencies resulting from duplicative efforts and lack of relevance for clinical decisionmaking. The federal technology assessment body could usefully coordinate other federal and private technology assessment activities.

FUNDING OF TECHNOLOGY ASSESSMENT AND EVALUATIVE RESEARCH

Clearly, more and better information is needed on which to base technology assessments and coverage decisions. The Institute of Medicine estimated that, in 1984, total expenditures for

technology assessment constituted only 0.3 percent of total health expenditures (Institute of Medicine 1985). Health plans need information from technology assessments to make coverage and purchasing decisions and to guide clinical practice. If some national coverage decisions are to be made, it is essential that they be informed by timely, well-performed technology assessments. This, in turn, depends on the availability of high-quality clinical studies.

It is desirable for producers of new technologies and treatments to bear the costs of proving that their products are safe and effective. Incentives to do so exist when they have exclusive rights to market the product and when this information is required of them by government or by payers. Capitated payment to providers strengthens their incentives to require good evidence of effectiveness. The incentives in place today do not stimulate sufficient research on comparative effectiveness in general practice, however, and even efficacy studies may not be adequately performed. Externalities may prevent consumers or individual payers from sponsoring evaluative research (Garber and Owens 1994). When no alternative sources of funding are available, effectiveness research is a public good that should be paid for out of a defined, adequate budget financed by the public. The money could come from the federal government or from a dedicated portion of all health care premium dollars. Funding is needed for comparative efficacy studies and to evaluate effectiveness after widespread dissemination.

If the evidence of the efficacy of a new treatment or technology justifies coverage but its effectiveness in practice needs to be studied, then it is a covered service and health plans should pay for its full clinical costs. The research sponsor would still have to pay for the research costs. As described in the previous section, systems should be created to facilitate the evaluation of covered services' effectiveness in general use.

The inadequacy of the amount of federal funds available to sponsor evaluative research has forced researchers to rely on health plans and providers such as hospitals to finance the clinical costs of therapies being tested in research trials. If increased public funding were dedicated to evaluative research, however, the extent to which health plans should pay for the clinical care associated with a research trial should depend on whether or not the treatment being studied is covered as part of the standard benefit package. Without sufficient evidence of the efficacy of a technology or treatment, the service would not be covered, and health plans should not be required to pay the full cost of the patient's participation in the study. It would be reasonable, however, to expect health plans to contribute toward such a trial the expenses that they would have incurred from the standard therapy (to the extent these expenses could be reasonably ascribed). These expenses may often be estimated from the comparison group of the trial. The rest of the clinical care costs—including the cost of any complications from the experimental therapy—and the cost of conducting the trial should come from the sponsor's budget. The federal government should provide funds for the development and improvement of methods to evaluate the effectiveness and cost of medical technologies and treatments.

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CHAPTER 13

GRADUATE MEDICAL EDUCATION REFORM

Since the Commission issued its recommendations on reforming graduate medical education (GME) in its *Annual Report to Congress 1993*, there have been a number of promising developments. During the summer of 1993, two significant GME reform bills were introduced in the Congress: one by Senator Rockefeller and Congressman Waxman, which draws substantially on the Commission's work, and a second by Senator Kassebaum. In addition, numerous interest groups have issued policy statements that support the creation of a national commission to develop and implement physician work force policies and the establishment of a national graduate medical education financing pool to which all payers contribute.

Perhaps most significant, virtually all of the major health system reform proposals include provisions that would affect the financing of graduate medical education. The Administration's health reform proposal bears many similarities to the approach recommended by the Commission, among them a national commission to allocate residency positions across specialties, an all-payer financing pool, prospectively set per resident payments, and transitional relief for hospitals that lose residents.[1]

The emphasis on building a more competitive health care marketplace under system reform, however, has raised the question of whether a national work force policy is needed at all. Some suggest that strengthened market forces will automatically result in the appropriate supply and specialty mix of physicians without the need for additional government action.

By contrast, the Commission, for reasons stated later in this chapter, remains committed to the policy it recommended one year ago.[2] The essential elements of this proposal are:

- a congressionally set limit on the total number of residencies to be funded;
- a federal body that, using both objective data and input from interested parties, would determine the distribution of these slots by specialty;
- selection of those residency programs to be funded on the basis of educational quality;

[1] This chapter uses the term, "residents," to refer to all postgraduate trainees. Trainees in subspecialty fields are often referred to as "fellows". This distinction is irrelevant under most GME reform proposals, however.

[2] For a more detailed discussion of the assumptions made by the Commission in developing these recommendations, its rationale, and additional background materials, see Chapter 4 of the Commission's *1993 Annual Report to Congress.*

- payment for the direct costs of GME from a national financing pool to which all payers would contribute a percentage of premiums for medical care services; and

- mechanisms to provide transitional financial relief to teaching hospitals that lose residents but still must meet essential service needs.

Over the past year, the Commission has further developed these recommendations, fleshing out those areas where its previous work offered only broad approaches. It has sought to outline the types of decisions that will need to be made if a national physician work force policy is enacted, to identify the types of information that will be required to make those decisions, and to suggest processes for implementation. Most of these concerns need not be resolved in statute; they are discussed here to provide guidance to the Congress and others about the policy and technical questions that will naturally arise if legislation is enacted.

This chapter begins by setting the Commission's recommendations in the context of the heightened debate on the reform of graduate medical education. It draws out the implications of a more competitive approach to health system reform for physician work force policy and explains why the Commission continues to consider its proposed approach as potentially more effective in meeting policy goals than either a wait-and-see approach or other regulatory models.

The second section explores some of the issues that will arise in allocating residency positions across specialties. These include the structure of the national commission that would make these decisions, data needs, and options for spreading cuts in residency positions across specialties to achieve specialty mix and aggregate supply goals.

The chapter then moves on to consider a second tier of issues: allocation of residency positions to individual programs. Because the recommendation that the medical profession make these decisions based on educational quality distinguishes the Commission's policy from others, the Commission has made a particular effort to make clear its rationale for this approach and to sketch out how it might be operationalized. The use of other criteria, such as minority recruitment and geographic distribution, is also discussed.

In the fourth section, several financing issues are reviewed. With respect to the per resident payment and the transition from fragmented financing sources to an all-payer pool, the chapter focuses on the approach taken under the Administration's health reform proposal. The section also considers an issue arising under any proposal that results in fewer residents overall or simply fewer residents being trained in inpatient settings—the ability of teaching institutions to meet service needs using nonphysician practitioners or house physicians.

Finally, the Commission raises several other issues that eventually will arise as national policies are implemented. These include potential roles that states may play under a national physician work force policy, and the preparedness of physicians to practice in a changing health system.

THE CHANGING CONTEXT FOR REFORM OF GRADUATE MEDICAL EDUCATION

The national debate on health reform has substantially changed discussion of graduate medical education in two ways. First, it has created a dialogue about whether a more competitive health care marketplace will create the kinds of incentives missing in the past to train relatively more physicians in generalist rather than specialist fields and fewer physicians overall. Second, the inclusion of GME financing provisions in most major reform proposals has raised expectations that GME reforms will be enacted, creating substantial discussion about which of these proposals will be most effective in reaching policy goals.

The Impact of a More Competitive System on the Need for GME Reform

Given the more competitive marketplace envisioned under the Administration's and other leading health reform proposals, some have begun to question whether an explicit national physician work force policy is necessary. In part, these questions arise out of skepticism about the ability of planners to predict accurately the future need for physicians in different specialties (Cohen 1993). Critics, for example, have pointed out that even the most rigorous forecasting models of a decade ago could not predict the impact of AIDS, advances in cardiac surgical techniques, or the proliferation of managed-care organizations on the physician work force (Rosenblatt and Lishner 1991; Tarlov 1986).

These critics also suggest that the market is already working to correct imbalances in specialty mix as managed-care organizations increase starting salaries for generalists (Cohen 1993). They argue further that, as enrollment of patients in capitated health plans increases, many consumers will only have access to the physicians affiliated with those plans and that access to specialists will be particularly restricted. Under these conditions, limits on system capacity need not come from the top down but will emerge from the bottom up as plans hold physicians accountable for resource use, clinical outcomes, and patient satisfaction (Reinhardt 1993).

The Commission questions, however, how quickly these bottom-up limits will come into play and the risks associated with doing nothing in the interim. At issue is how quickly vertically integrated health care systems will come to dominate most markets. If a substantial amount of care continues to be provided under fee-for-service arrangements, then little may change. That is, physicians will still be able to affect demand for their services, pushing up the aggregate number of services provided with each additional physician trained.

Whether market incentives will mitigate the impact of physician supply and specialty imbalance on expenditures depends not only on what happens to the market for physicians' services, but also on the impact of the market on the educational system. Incentives to maintain the current number and mix of residents stem from two sources. First, teaching hospitals and their chiefs of service have long relied on residents as a relatively inexpensive

source of highly skilled labor for meeting service needs. Resident staffing patterns, therefore, are not likely to reflect societal demand for physicians in various specialties. Trainees in procedural fields such as cardiology and gastroenterology may be particularly valuable, because their presence increases faculty productivity and because high fees provided for faculty services in these fields make it possible to use clinical income to support additional residents.

Second, under managed competition, teaching institutions may be under more pressure than ever to economize. Thus, until hospitals are unable to find qualified applicants, they will likely continue to rely heavily on residents in their staffing, regardless of what happens to those residents once they have completed training.

Beyond meeting service needs, medical educators also have an incentive to continue business as usual. Having residents confers prestige upon the faculty by affording opportunities to teach; it also provides convenience by having residents available for after-hours and weekend coverage.

The length of the training pipeline will also affect how quickly new incentives change physician behavior and how demands for different types of physicians will be met. First, many of those who will be entering practice over the next several years have already made choices about training based in part on the financial incentives under the current system. Second, those now in medical school will likely be more attentive to the market for residency positions than to the market for practicing physicians. As long the educational market is slow in responding, the choices facing these students may change little. And, finally, many expect that as market forces grow stronger, immediate needs for fewer specialists and more generalists will be met by retraining those already in practice rather than by newly trained physicians.

The Commission also takes issue with those who argue that planning can never be sufficiently precise to merit its use, as well as those concerned that deliberate decisions about the number and mix of physicians could so quickly and badly misjudge needs as to result in irreparable damage. It would be foolish to suggest that any approach to planning will result in a perfect match between the work force and population health needs. But given adequate mechanisms for monitoring and the flexibility to make incremental changes, such a system is likely to do far better than the current one if present trends persist. The length of the training pipeline and the large stock of practicing physicians would also make it difficult to make egregious mistakes. For example, even if the number of first-year residents in generalist fields increased to 70 percent immediately and the percentage of those graduates entering generalist practice increased to 50 percent, only 43 percent of physicians would be generalists by the year 2020 (COGME 1992).

Finally, planning has been criticized as unnecessarily restricting specialty choice, potentially forcing medical students to seek careers in fields in which they have little interest or for which they are

poorly suited. It is the Commission's view, however, that given the substantial public investment in graduate medical education, public decisions about the number and type of physicians those dollars will support are appropriate. Although tighter limits on the number of residency positions will make it more difficult to obtain a position in the field of one's choice, competition for slots could result in a better match between trainees' talents and their eventual specialty.

For these reasons, the Commission continues to believe that work force planning will be essential to attain policy goals. It will be important, however, to monitor the impact of market forces on physicians' specialty and location choices, as well as the willingness of college students to pursue careers in medicine. If the market creates substantially more powerful incentives than can now be predicted, a provision could be added to the legislation that permits a sunset of the planning process.

Variations on the Commission's Approach to Reform

Other than those who argue that market forces will shift specialty mix and constrain supply, there is a general consensus among policymakers that a national physician work force policy is needed and that an effective policy should include certain elements. These include an all-payer financing pool, prospectively set per resident payments, and a method for determining which residency positions will be eligible to receive those payments. There is some disagreement, however, around how allocation decisions would be made.

The Commission has recommended a national model for allocation, with a national commission making the initial decision on the number of positions by specialty. Decisions about which positions to fund within those specialty targets would also be made at the national level, but these would be made by the profession on the basis of judgments regarding educational quality. All positions approved as part of this process would be funded for the full length of training. The Administration's health reform proposal also takes a national approach; in this respect, it differs from the Commission's policy only in that decisions about which specific positions to fund would be made by the Secretary of Health and Human Services (HHS), rather than by private accrediting bodies or some other organization representing medical educators and the medical profession.

Other allocation options still under discussion are the use of medical school-led consortia, as recommended by the Council on Graduate Medical Education (COGME), or other systems of allocation at the regional, state, or local level. These approaches admirably attempt to create stronger links among work force decisions, local health needs, and institutional capabilities than may be possible at the national level. Nevertheless, the Commission questions the feasibility of developing a national policy that relies on consortia or other decentralized bodies that currently do not exist to carry out policy objectives.

In addition, the Commission disagrees with the view that this approach would result in decisions that are less political than those made at the national level; instead, it sees decentralization as

only deferring decisions to smaller forums in which politics are likely to play the same or an even more important role. For example, within a consortium, clinical departments with substantial political clout would be in a favorable position to be allocated more residents.

Of greatest concern to the Commission, however, is the fact that any subnational allocation system will require relatively arbitrary decisions about who gets which positions to allocate. It was this result that the Commission sought to avoid when it recommended allocation at the national level, with decisions about which positions to fund based on educational quality. This and the Commission's other concerns about subnational allocation are described below.

Consortia. COGME has recommended that the Secretary of HHS, in consultation with an advisory commission, allocate positions to consortia consisting of a medical school, residency programs, teaching hospitals, and other sites where residents may train. Each consortium would then make its own decisions about the specialty mix of its trainees, with the only requirement being that 50 percent of graduates enter primary care practice (COGME 1994). This is also the approach taken in legislation introduced by Senator Kassebaum.

The consortia approach is appealing because it minimizes federal intrusion, allows decisions to be made that reflect local needs, and reduces the number of entities receiving payment from the federal government. In addition, it potentially facilitates the development of collaborative relationships among a variety of institutions that can provide experiences beneficial to residents, and promotes greater continuity in medical education.

On the other hand, few consortia currently exist, and local circumstances may hinder their development in some areas. Among these obstacles are the presence of more than one medical school in a city, ownership of a major teaching hospital by the medical school, historically strained relations between academic medical centers and community hospitals, or communities that fail to see the need for such coordination (Nolan 1993).

Another concern about COGME's approach is the lack of overall direction on the mix of physicians in various nonprimary care specialties. It is conceivable, for example, that once each consortium had made its decisions about the mix of residents to train, the result could be that the nation would be training the right number of primary care physicians but too many plastic surgeons and too few infectious disease specialists. COGME would address this problem by creating a federal monitoring system that could identify such problems and empowering a national physician work force commission to make alternative direct allocations (COGME 1994). Such a solution, however, appears to negate the benefits of the consortia approach (the ability to make training decisions consistent with local needs and institutional priorities) and would essentially result in two parallel processes—one federal and one at the consortia level.

Allocation at Regional, State or Local Levels. Another approach to allocation would be to shift decisions to the regional, state, or local level. Although most such approaches have not

been well articulated. the basic notion is that a national body would award a number of residency slots to other decisionmaking bodies, which would then determine both the appropriate specialty mix and the exact programs and positions to be funded.

Although allocation at the subnational level has been championed by those who favor decentralized decisionmaking, there are two principal objections to this model. First, it would require creating multiple decisionmaking bodies and considerable duplication of effort as these bodies attempt to assess needs, develop criteria for making cuts, and set up processes to redistribute positions. Second, there are concerns that such an approach would inevitably freeze in place the existing geographic distribution of training programs. Whereas this would protect training programs in smaller states that might lose out in a national competition, it would also require proportionate cuts in those states that train a substantial number of residents. Thus, cuts could be made in high-quality training programs in some states while weaker programs in other states were maintained. Finally, many would argue that most medical students are motivated first by finding the best possible training position from an array of national choices and only secondly by the location of that program. This may be particularly true for some of the most specialized fields. But even primary care physicians often relocate from the residency site. This mobility thus raises questions about the desirability of making allocations based on geographic criteria.

The Association of American Medical Colleges has outlined for discussion what it views as a possible compromise, in which allocation decisions would occur at three levels: small specialties viewed as national resources at the national level, middle-size specialties at the regional level, and primary care and other large specialties at the local level (D'Alessandri 1993). This approach would address the concerns of those programs in highly specialized fields or smaller ones that might fare poorly if decisionmaking were more decentralized, because it removes the risk of a mismatch between the current location of training programs and areas awarded slots to allocate. It does not, however, address the other problems mentioned above.

ALLOCATION OF SLOTS BY SPECIALTY

Under both the Commission's recommended policy and the Administration's health reform proposal, a federal advisory commission would determine the number of residency positions by specialty. Some have criticized this approach, suggesting that it will be impossible for any national body to determine the appropriate number of physicians that should be trained in each of more than 80 accredited fields. It is the Commission's view that, while no process can determine a precise distribution of physicians across specialties, a national physician work force policy can ensure a more rational outcome. Given opportunities for monitoring and the ability to make midcourse corrections, a system that attempts to make allocations based on objective data and input from interested parties is more likely to approximate the "correct" number of physicians by specialty than one that merely reflects the ad hoc result

of thousands of decisions made by hospital administrators, training program directors, and others.

To implement this recommendation, a number of additional decisions must be made about the structure of the federal decisionmaking body, the process it would use in making specialty allocations, and the challenges that will arise in using this process to meet policy goals of shifting specialty mix and reducing aggregate supply.

Process Issues

In its 1993 report, the Commission recommended that a federal body take on the job of allocating positions across specialties because this would lead to a more rational and equitable result than could be achieved by making across-the-board cuts. This body would:

- have an open and deliberative decisionmaking process that uses objective sources of information;
- be flexible and responsive to the population's changing health needs as well as to changes in the organization and delivery of health services;
- be able to build consensus by drawing on the views of interested parties, both through solicitation of comments and by representation on the commission;
- develop policies that complement or coordinate with other federal training efforts but that are accountable to broad policy goals rather than just to the interests of the executive branch; and
- have adequate funding to support its analyses.

After considering several alternatives, the Commission concluded that a commission that is advisory to the Secretary of HHS would be the most appropriate organizational form for this task. Such an advisory commission would ensure the involvement of knowledgeable persons from many different perspectives in the policymaking process. And because advisory committee members would not be officials of the federal government, they would not have to give up other commitments during their term of service. Finally, this form would also provide opportunities for coordinating national policy affecting the supply and mix of residents with other federal health programs. These include both those directly related to the physician work force (such as administration of the all-payer financing pool, support for primary care under Title VII of the Public Health Service Act, and financial aid for health professions students) and those directed at other financing and delivery issues.

The Administration's health reform proposal follows this model by creating a national council on graduate medical education for this purpose. The legislation further specifies that

its members will include consumers, medical educators, physicians in private practice, representatives of regional and corporate health alliances, and representatives of health care plans. The Secretary of HHS may also designate certain federal officials to serve as ex-officio council members, presumably facilitating coordination with HHS as well as with the Departments of Veterans Affairs and Defense, which also finance and run graduate training programs.

One oversight in the Administration's proposal that needs to be resolved is a mechanism for ensuring participation in the council's work by disciplines other than allopathic and osteopathic medicine that currently receive Medicare direct GME payments to support residents but that are not specifically mentioned in the Administration's bill. These include podiatric medicine and oral surgery (a specialty of dentistry). While guaranteeing a spot on the council for these disciplines would be cumbersome as well as unfair to medical fields not so protected, mechanisms should be put in place to ensure that their input is considered as allocation decisions are made.

Reaching Policy Goals

As envisioned by the Commission, specialty allocation decisions should be made in a manner that results in both training a greater proportion of physicians in primary care and reducing the total number of physicians trained. Although these goals are not contradictory, trying to achieve them simultaneously creates certain trade-offs. For example, while specialty mix goals could be achieved by expanding the number of positions in primary care fields, if supply goals must also be met, then expansion of primary care would come only at the expense of even steeper cuts in all other specialties. This section explores this and other challenges that will arise.

To better understand these issues, it is helpful to recognize the complexity of the nation's system of graduate medical education. Allocation decisions may affect more than 80 specialties accredited by either the Accreditation Council for Graduate Medical Education (ACGME) or the Council on Postgraduate Training of the American Osteopathic Association (AOA). Additional fields may be added, however. This is because residency programs in podiatry and oral surgery are accredited by other bodies and also receive training support under Medicare's GME financing methodology. Moreover, the number of accredited fields is not static.

It should also be noted that the entry points into various fields are staggered. In some specialties, residents match with training programs as they graduate from medical school; these include not only the three primary care specialties (family practice, general internal medicine, and general pediatrics) and general surgery, but also more specialized fields such as neurology, anesthesiology, and ophthalmology. Other fields are entered after completing several years in a primary field; for example, training in the subspecialties of internal medicine (e.g., cardiology, gastroenterology, and rheumatology) begins after completion of

three years in internal medicine. And still other fields allow multiple pathways to entry; plastic surgery training, for instance, may follow three years in general surgery or two years in either orthopedics or otolaryngology (each of which is typically preceded by a year in general surgery).

Third, the length of training in any given field is not uniform across either programs or residents. Accreditation requirements are generally stated in terms of minimum number of years; some programs may require additional experiences. Moreover, many residents stay an additional year or two beyond the minimum requirements to obtain additional training, for future faculty development, or to do research.[3] Under any allocation method, a decision would have to be made about how to support residents that stay in training beyond the minimum number of years for each of these reasons.

Setting Specialty Mix Goals. Most proposals to reform graduate medical education advocate shifting specialty mix so that at least 50 percent of physicians will enter practice as primary care physicians. This goal raises two questions. First, is 50 percent the correct number and, second, which specialties should be counted toward the 50 percent goal?

Although the Commission has assumed that the nation is training too many highly specialized physicians relative to the number trained in primary care, it has never subscribed to the 50-50 goal. Even though this mix is closer to that in other Western industrialized nations, it is not based on any empirical foundation. Moreover, despite the general wisdom that this is also the mix used by managed-care organizations, preliminary results from a survey of group- and staff-model health maintenance organizations found this is not necessarily the case (Rentmeester and Kindig 1993). Finally, it may be necessary to increase the number or relative proportion of physicians in other specialties, not because they can be considered primary care, but because of true shortages of practitioners who can provide certain specialized services. For these reasons, the Commission has recommended giving substantial latitude to the federal work force body in shifting specialty mix toward a greater emphasis on primary care.

The question of which specialties should be considered primary care, however, is extremely important under proposals advocating a 50-50 split. From a policy perspective, the more residents that can be counted as primary care, the faster this goal will be reached. From a political perspective, the 50-50 goal, coupled with anticipation of cuts in residency positions, has touched off efforts by a number of physician specialty societies to protect their numbers by being designated as primary care. This scramble for federal designation appears to have become more intense since the Administration included obstetrics-gynecology in its definition of primary care fields. At the same time, its specialty mix goal shifted from 50-50 to 55 percent primary care/45 percent specialists. This implies that obstetrician-gynecologists really are not full-time primary care providers.

[3] The status of chief residents varies substantially. In some institutions, they are treated as junior faculty; in others, they are simply regarded as the most advanced trainees.

The Commission has previously made no formal recommendations on which specialties should be designated as primary care. In fact, implementation of its proposed policy would not require making such designations. In the past, however, the Commission has used a working definition that includes only family practice, general internal medicine, and general pediatrics. This definition is based on the rationale that providing primary care services or being an entry point into the health system are not the defining characteristics of the primary care physician. Citing the work of the Institute of Medicine and others, the Commission has argued that primary care physicians are distinguished by their training as generalists who do not limit their practice by type of condition or organ system, and who provide both continuous and comprehensive services. In addition to furnishing preventive services and managing acute and chronic illness, the core of primary care training and practice concerns making decisions about appropriate treatment for patients presenting with undifferentiated symptoms (PPRC 1992).

Obstetrician-gynecologists are the principal source of care for more than half of all women (ACOG 1992). Even so, current training in this field does not emphasize this core set of generalist skills. The accreditation requirements for obstetrics-gynecology residency programs are more similar to those in other surgical specialties than to those for family practice, for instance. These requirements appropriately focus on ensuring that residents have training in areas such as management of the medical and surgical complications of pregnancy, genetics, obstetrical anesthesia, medical and surgical gynecology, diagnosis and nonsurgical management of breast disease, and reproductive endocrinology. There is no requirement that residents follow a panel of patients over time, and ambulatory experience is not emphasized (AMA 1993a). Under these circumstances, the Commission finds it difficult to justify designating obstetrician-gynecologists as primary care physicians.

Training in obstetrics-gynecology may be changing, however, to focus on women's health care needs beyond gynecological and reproductive services. The American College of Obstetricians and Gynecologists has convened a task force on primary and preventive health care, which would reorient the graduate medical education curriculum toward age- and risk-specific health screening and disease prevention services for women. This suggests that the designation of obstetrics-gynecology as a primary care specialty could be revisited once this new curriculum is in the field.

Setting Aggregate Supply Goals. The Commission previously recommended that the Congress set a limit on the number of first-year residency positions and suggested setting this limit at 110 percent of the number of U.S. medical graduates. Currently, the number of first-year residents exceeds the number of graduates of U.S. medical schools by about 30 percent.

In the Commission's view, such limits on the total number of residency positions are essential for two reasons. First, capping the number of positions available is the primary vehicle for putting the brakes on growth in supply and thus mitigating the impact of the growing number of physicians on health care costs. The fact that per capita spending is

positively correlated with the number of physicians has been well documented (Evans 1974; Fuchs 1978; Mitchell and Cromwell 1981; Welch et al. 1993). If the fee-for-service sector remains substantial after system reform, then this situation will likely continue.

Second, a limit on positions is essential to creating a link between decisions about financing and those about the number and mix of residents. For example, it will be difficult to increase the relative number of primary care physicians if the total number of physicians continues to grow. The lack of such a link is perhaps the greatest flaw of the current system. Rather than reflecting any notion of population health need, the existing physician work force is the ad hoc result of uncoordinated decisions made by teaching hospitals, residency programs, and accrediting bodies.

The Administration's proposal does not include an explicit limit on the total number of positions. Instead, the legislation authorizes but does not require the new National Council on Graduate Medical Education to reduce the number of approved positions in each of the academic years 1998-1999 through 2002-2003. The Commission anticipates, however, that it would be extremely difficult for the national council to impose such a limit without explicit congressional direction.

Ironically, the financing provisions of the Administration's bill could ultimately function as a cap. Because the amount of funding in the work force account is specified, per resident payments made to training programs would have to conform to this amount of funding divided by the total number of residents approved. If the number of approved positions increases, therefore, the per resident payment would automatically be lowered, perhaps below the current base level of national average resident salary and benefits plus the cost of faculty supervision. One can speculate that chronic underfunding, a particular problem for primary care programs that have limited ability to raise funds from outside sources to support residents, could prompt the national council to explicitly constrain the number of residents to that which could be adequately funded.

Making Initial Cuts in Training Positions. Assuming that there will be a cap on the number of first-year residents, the initial task facing a national work force commission will be deciding how to spread cuts in residency positions across specialties. This is a difficult question without an empirical answer.

Cuts made to achieve the 110 percent cap are primarily intended to reduce the aggregate supply of physicians, although they can also be structured to support some changes in specialty distribution. To implement this cut, a decision must be made about whether to spread reductions across all first-year residents or whether to hold some specialties harmless. For example, many assume that primary care fields would not be cut (at least initially), with necessary cuts spread across all other specialties that can be entered (or which students

match) directly after medical school.[4] But it may also be desirable to protect other specialties. Some specialties, for instance, have claimed that objective data show that these fields are in short supply. Among these are general surgery, obstetrics-gynecology, pathology, preventive medicine, and psychiatry. An argument can also be made that surgical specialties should not be reduced because they have successfully controlled the number of residents in surgical fields since the mid-1970s.

The obvious trade-off is that as more entry-level specialties are held harmless, the deeper cuts will be in all remaining entry-level specialties. If primary care were exempted, this cut would amount to about 50 percent. If primary care and general surgery were exempted, the cut would increase to nearly 60 percent.

The disruption that would be caused by cuts of this magnitude raises questions about whether it is more important to quickly achieve reductions in aggregate supply or shifts in specialty mix. Under the 110 percent limit, progress can be made toward increasing the percentage of physicians in primary care fields only if other specialties take deep cuts. The alternative is to phase in the achievement of specialty mix goals by holding the absolute number of primary care residents constant, allowing the percentage to rise gradually as cuts are made in other fields.

In the Commission's view, reducing the aggregate supply of physicians should take priority over attainment of specialty mix goals. It holds this position for two reasons. First, as mentioned above, there is substantial uncertainty about whether the appropriate specialty mix should be 50 percent primary care; it could be less or even more. Second, the evidence about the impact of physician supply on total expenditures is more compelling than that concerning specialty mix.[5] In short, it is logical that training fewer physicians overall will likely make a greater contribution to cost containment than the substitution of generalists for specialists.

A complementary method to reduce the supply of physicians would be to reduce class size at the medical school level. Even though there are few levers that the Congress can use to affect undergraduate medical education, the Commission has long had serious concerns about growth in medical school enrollment. Increasing enrollment will undermine the effectiveness of any effort to constrain supply via discipline in graduate medical education. For this reason, some organizations are advocating that the number of first-year residents be tied to the current number of medical school graduates, rather than to the number of graduates at the time cuts are made (APDIM 1994; AAFP 1994). The Commission plans to examine this issue further and consider policies directed at the undergraduate level. Such policies, however, would not obviate the need for constraints on the number of residents. Even if the number of

[4] These specialties include anesthesiology, dermatology, emergency medicine, neurological surgery, neurosurgery, nuclear medicine, obstetrics-gynecology, ophthalmology, orthopedic surgery, otolaryngology, pathology, physical medicine and rehabilitation, preventive medicine, psychiatry, radiology, surgery, and urology.

[5] Sloan and Schwartz (1983) estimated a 0.4 percent increase in expenditures for every 1 percent increase in the physician-to-population ratio.

U.S. graduates is substantially constrained, limits on the number of residents are essential to prevent continued growth in physician supply from an influx of international medical graduates.

Limiting Entry to Subspecialty Fields. The other mechanism by which specialty mix goals could be achieved is limiting entry to specialization following the initial residency (for example, entry into internal medicine subspecialties in the fourth year of training). These cuts will affect both the supply of residents and of practicing specialists but not the aggregate supply of physicians; that is, an internist who no longer has the opportunity to become a subspecialist remains an internist.

Currently, about 55 percent of internal medicine residents and 30 percent of pediatric residents subspecialize (Kimball 1993; American Board of Pediatrics 1993).[6] The national commission could decide to reduce these percentages so that more of these individuals remain generalists.

Ideally, however, specialty mix goals would be achieved by a less arbitrary process. That is, rather than imposing arbitrary limits on entry into subspecialties, cuts would be spread across all the potential entry points to training (those in initial residencies as well as those in fellowships) so that the resulting specialty distribution of graduates meets some external standard. One such external standard would be the mix of physicians in an efficient managed-care organization with appropriate adjustments both for patient characteristics (e.g., age and health status) and possibly for differences between managed-care practice and the fee-for-service sector (e.g., productivity and out-of-plan use). Using this information, the commission could project the distribution of potential practitioners at a point six or seven years after medical school graduation and then work backwards to set numbers at each entry point that would result in that distribution.

While there is little systematic information on staffing patterns in managed-care organizations that could be used to guide such decisions, this information could be developed quickly. Already the Robert Wood Johnson Foundation and the Health Resources and Services Administration are funding studies of staffing patterns that potentially could be used for this purpose.

Over the long term, data will also be required on needs for nonphysician practitioners. This is because decisions about the appropriate specialty distribution of physicians will depend not only on the roles of physicians in different fields, but also on the roles of other health professionals. Many anticipate, for example, that as the health care market changes, the roles

[6] A substantial number of these subspecialists pursue a hybrid practice that is part primary care and part specialty care.

of nurse practitioners and physician assistants, and the ways in which they collaborate with physicians, will change as well.[7]

The Administration's proposal includes separate provisions to support graduate training for advanced practice nurses, including a separate work force account and a separate council to allocate funding to training programs. Over time, these two work force policies should be merged so that instead of running in parallel, one set of decisions could be made in the context of a work force of health professionals. To do so, however, will require substantially more agreement than now exists about the appropriate roles of physicians and nonphysician practitioners.

ALLOCATION TO INDIVIDUAL PROGRAMS

Once the decision is made about the number of positions to be funded for each specialty, a second tier of decisions will be required about which specific positions in these fields should be funded. In its 1993 annual report, the Commission recommended that these decisions be made by the bodies that accredit graduate training on the basis of educational quality.

Because concerns have also been raised that a limit on residency positions will disadvantage minority students, it may also be appropriate to broaden this criterion to protect programs meeting other important social goals, such as enrollment of underrepresented minorities or those with a track record of placing graduates in underserved rural and urban areas. Other proposals, including the Administration's, would also use geographic distribution in making these decisions. Policy issues surrounding these criteria are discussed below.

Quality

The Commission recommended that allocation to individual programs be based primarily on educational quality after rejecting other approaches as either indiscriminate (e.g., across-the-board cuts), administratively burdensome, or unlikely to be accepted by the affected parties as would decisions made entirely by the federal government. The Commission, in particular, sought a method that would preserve what is best about the current system of graduate medical education and that would provide medical educators and others with a substantial role in making decisions.

Despite claims by some that such an approach would be impossible to implement, the Commission still believes this strategy is workable and will best meet national needs. This view was reinforced by testimony presented at the Commission's hearing in November 1993, in which several organizations supported the approach and suggested dimensions of

[7] See Chapter 14 for a broader discussion of the roles of nonphysician practitioners as well as policy issues related to payment, practice, and education.

educational quality that potentially could be measured as part of graduate medical education reform. These include physical characteristics, such as facilities and faculty supervision; the content and character of the clinical experiences available to residents; the competency of graduates; and other program outcomes, such as whether graduates pursue primary care practice or locate in medically underserved areas (Glickman 1993; Griner 1993; Ojemann 1993; Saultz 1993; SGIM 1993).

The Commission is also encouraged by an ACGME draft statement concerning the role of that body as it relates to national physician work force planning (ACGME 1993). That draft stated that the quality of training programs should be the primary consideration in allocating positions, that the medical profession should have the responsibility for making such quality judgments, and that given the ACGME's structure and expertise, it is the most appropriate vehicle for making these judgments. Several caveats were offered, including the need for adequate funding to develop and implement a stratification system as well as appropriate legal immunization to protect the organization from court challenges that might result from this process (ACGME 1993).

Even if the ACGME's parent organizations never approve this statement, it is heartening because it demonstrates that people knowledgeable about medical education and the accreditation process believe this information and expertise could be used to rank programs.[8] This is a marked change from earlier pronouncements that accreditors could make decisions only about programs' ability to meet certain minimum requirements. It also gives the Commission hope that even if the ACGME ultimately refuses to play a role in implementing a national work force policy, the approach of making decisions based on educational quality could still be pursued.

In the year ahead, the Commission will continue to examine this issue. It hopes to learn whether the ACGME and other accreditors would be willing to stratify programs (for example, according to quartiles or quintiles), and if they would consent to assuming this role should their recommendations be only advisory to the Secretary of HHS. The Commission is also interested in how assuming this task would affect the ACGME's work as an accrediting body, or if another parallel body should be formed to take on these tasks. Finally, it hopes to include the bodies that accredit nonallopathic fields (e.g., osteopathic medicine, podiatric medicine, and oral surgery) in these discussions.

The Commission also plans to develop further the specific criteria that might be used to assess the quality of training programs. It has already begun exploring these ideas informally with medical educators in different specialties, types of training sites, and areas of the

[8] The ACGME has five parent organizations that determine policy matters. These are the American Board of Medical Specialties, the American Hospital Association, the American Medical Association, the Association of American Medical Colleges, and the Council of Medical Specialty Societies. In addition, representatives of the federal government, house staff, and the public sit on the ACGME.

country. In addition, it plans to convene a series of focus groups during the spring of 1994 that would bring together physicians, residents, and accreditors to discuss this issue.

Other Criteria

Policymakers have also been concerned about how an allocation process would affect the attainment of other social objectives beyond reaching the right supply and specialty mix. For example, the Administration's proposal would use several criteria besides educational quality when funding training programs. Two of these additional criteria—minority representation and geographic distribution—are considered here.

Since the Commission made its recommendations, concerns have been raised about how limits on the total number of residents would affect opportunities for underrepresented minorities, especially those in subspecialty fields and those interested in pursuing academic careers (Masters 1993; Sherrod 1993). The Commission recognizes the need to create greater opportunities for minorities in all medical fields. Additional efforts are also needed to attract minority youth to medical careers and to develop minority medical students' interest in academic and research careers. For that reason, it may be appropriate to include minority representation in the criteria for allocating residency positions.

Another important concern is the geographic distribution of training programs. There are several reasons for this concern. First is the fear among some parties, particularly those in rural states, that their programs will lose in a competition with programs based at elite medical schools and in large urban centers. Whether this will actually happen depends on the specific criteria used to measure educational quality. Programs that are not linked to prestigious institutions, however, are not willing to gamble on the possibility that these criteria would put their own efforts in a positive light. Explicit consideration of geographic distribution is seen as a more definite source of protection.

A second reason is that many public officials regard the location of training as an important predictor of eventual practice site. Thus, establishing new training programs or increasing the number of residents in existing ones is seen as one mechanism available to states or communities to ensure a sufficient supply of physicians in various specialties.

The literature appears to provide some support for this view by demonstrating a positive correlation between the state in which training occurs and practice location.[9] But one cannot infer that creating or maintaining training opportunities in particular states will cause more physicians to practice there. For example, physicians who choose to practice where they train may have selected the training site for that very reason. Moreover, the absence of training positions may not necessarily dissuade a physician from practicing in a state. Finally, if the

[9] See, for example, Haynes and Killian 1990, Burfield and others 1986, and Hough and Marder 1982.

market in a given geographic area cannot sustain practicing physicians because of poor economic conditions or lack of opportunities to interact with professional colleagues, the presence of a training program is not likely to overcome these difficulties.

The Commission questions, therefore, whether requiring geographic distribution of training programs will be an effective policy for ensuring a sufficient share of practicing physicians in hard-to-serve areas. Clearly, an area benefits from having a training program from the service provided by residents and any propensity they may have to stay after training. But the marginal benefits of maintaining, expanding, or creating programs (in terms of physicians retained) may be small.

Other policies might attract more physicians to a state or a community. These include raising Medicaid payment rates, offering salary support to fully trained physicians, and supporting links between physicians in the community and those in academic medical centers.[10]

Although the Commission is sympathetic to those communities that have gone to extraordinary lengths to ensure an adequate supply of practicing physicians, it is difficult to justify making cuts in high-quality training programs to ensure that all states or geographic areas can maintain training programs.

FINANCING

Once allocation decisions have been made, attention will shift to the flow of funds from the all-payer financing pool to individual residency programs. The Administration's health reform proposal, while generally consistent with the Commission's, raises three areas of concern. These are the adequacy of the per resident payment, the transition of financing from a system in which only Medicare pays explicitly for the direct costs of graduate medical education to one in which all payers contribute, and the ability of teaching institutions to meet service needs with fewer residents. These concerns are discussed below.

Per Resident Payments

In its 1993 report, the Commission recommended that per resident payments from the all-payer pool be prospectively set. This approach would replace Medicare's current methodology, which has been much criticized because of substantial variation in payment across hospitals—variation that is thought to reflect accounting practices, payments to supervisory physicians, and historical inefficiencies, rather than true differences in the costs of supporting GME.

[10] See Chapter 22 for a discussion of bonus payments Medicare pays to physicians practicing in Health Professional Shortage Areas.

The Administration has proposed a standardized per resident payment that would be based on two components: the national average salary (and benefits) of residents plus the national average costs for faculty supervision. No allowance would be made for other institutional overhead. If this methodology were implemented in the current academic year (1993-1994), the per resident payment would be $53,975.

Some teaching hospitals, particularly those in large urban areas, fear that this amount will not cover the higher costs of training in their institutions. Although the Commission continues to believe that payment for the costs of graduate medical education should be prospectively set rather than based on historical costs, it is concerned that the Administration's proposed methodology may not recognize legitimate differences in the costs of training. The development of adjusters that acknowledge these variations warrants further attention. Such adjusters might include those reflecting geographic variation in input prices (such as wage indices), or differences in the mix of residents by specialty or year of training that may affect the costs of training.

Transition to the All-Payer Pool

The Commission also has concerns about the transition to the all-payer financing pool outlined in the Administration's proposal. It is scheduled to take place between 1996, when the health professions work force account becomes available, and 1998, when all states presumably will be fully participating under the terms of the legislation.[11] Beginning in 1996, Medicare would discontinue its current payment method, transferring the funds it would have otherwise spent on the direct costs of GME to the work force account. In that year and in 1997, the full per resident payment would be made from the work force account but only for those residents training in participating states. In all other states, the amount paid per resident would be a pro rata share of the funds remaining in the work force account.

Whether the work force account will be adequate to support training during this transition period will depend upon the validity of two key assumptions the Administration has made about the total number of residents in training and the pace at which states join in the new health care system. First, the Administration assumes there will be some 102,000 residents in each of the years 1996, 1997, and 1998. Of these, about 13,000 would continue to be supported by the Departments of Veterans Affairs and Defense, leaving 89,000 to be supported by the all-payer pool. In 1993, however, there were roughly 96,000 residents—4 percent more than in 1992 and a 30 percent increase over the past decade (AMA 1993b;

[11] States are said to be participating in the plan if they submit documentation to the National Health Board demonstrating that they have established regional health alliances, certified health plans to be offered by alliances, assured the financial solvency of those plans, and designated a state agency or official to coordinate state responsibilities. States opting for a single-payer approach are also considered to be participants once those systems are in place.

Crowley 1982). It thus seems optimistic to assume that only 102,000 residents will be in training in 1998.[12]

The second assumption being made is based on the notion that 15 percent of the states will be participating in 1996 and 40 percent in 1997. The Administration has taken this idea further, presuming that residents are distributed evenly across states so that 15 percent of all residents will be fully supported by the all-payer pool in 1996, and 40 percent in 1997.

The data do not support this, however. There is substantial geographic variation in the number of residents per 100,000 population. Although the national average is 35 per 100,000, this number ranges from zero in several states (Alaska, Idaho and Montana) to 62 in Massachusetts and 74 in New York (AMA 1993b).

In addition, many expect that the states, such as New York, Pennsylvania, and Illinois, that have substantial numbers of residents, will be among the last to participate in the new health system. If only a handful of states, or states with few residents, are participating at the beginning of the transition, the pro rata share to be paid for residents in all other states will be proportionately lower. The concern is that this amount could be too low to support residents adequately. One way to avoid this problem would be to continue using the current Medicare methodology until 1998, when all states must be participating, or continue Medicare payments to nonparticipating states during the transition. This approach would require that Medicare make contributions to the all-payer pool (to support residents in participating states) and directly to teaching institutions. But it would avoid potential disruption during the transition.

Meeting Hospital Service Needs

The final financing issue about which the Commission is concerned is whether teaching institutions that lose residents will still be able to meet critical service needs. This issue was explored in the Commission's 1993 report, which suggested that hospitals could respond by eliminating services or substituting highly skilled nonphysician practitioners or community physicians for residents. The Commission further recommended making a portion of funds from the payer pool available to institutions that downsize or close training programs but that still must meet essential service needs, at least in the short term.

The Administration included transitional relief payments in its proposal, making continued per resident payments available to institutions that lose positions. These payments would be available for four years, declining from 100 percent replacement to 25 percent over this period.

[12] The ability of the national council to constrain the total number of positions does not become effective until after this transition period.

Some continue to be concerned, however, that this is more than a transitional issue. That is, long after transitional payments have ceased, many institutions will have ongoing responsibilities to serve patients previously cared for by residents. Particularly troublesome is how these hospitals—especially public ones serving high-risk, inner-city populations—will be able to finance hiring resident substitutes.

Little is known about the adequacy of alternative financing sources, but a recent survey of nearly 200 major teaching hospitals found that using physician assistants and nurse practitioners as substitutes for residents is expanding rapidly in surgical and medical departments. Virtually all respondents were satisfied with this, noting that the major barrier to increased use of substitutes was scarcity of qualified personnel, rather than lack of funding (Riportella-Muller et al. 1994). These results suggest that, given sufficient commitment to exploring alternative staffing patterns, teaching hospitals can continue to meet their service needs, even without residents.

While the experiences of hospitals that have used resident substitutes are encouraging, they do not answer whether financing needs will be long term or merely transitional. In part, this will depend upon the extent to which insurance coverage is made available to currently uninsured and underinsured individuals. It may be important to set up monitoring processes that will keep policymakers abreast of hospitals' ability to meet clinical needs, especially those serving vulnerable populations.

FUTURE DIRECTIONS

The Commission continues to believe there is a need for federal policies that lead directly to reductions in resident supply and changes in specialty mix. A process that restricts the total number of residency positions and links the clout of public financing with informed decisionmakers within the medical profession will help achieve these goals.

The Commission recognizes, however, that the supply and specialty distribution of physicians will continue to be affected by factors other than federal GME financing policy. Coordination with policies at the state level will be particularly important. In addition, the preparedness of physicians to practice in a rapidly changing health system depends not only on having the right mix of training opportunities but also on developing appropriate curricula. Of particular importance will be the ability of physicians to practice effectively in a managed-care environment and to meet the medical needs of the growing elderly population.

The Role of States Under a National Physician Work Force Policy

States have long been active in the financing of medical education at both the undergraduate and graduate levels, primarily as a means to ensure a supply of practicing physicians to serve their communities. Assistance has ranged from general support for public medical schools to loan and scholarship programs for students to investment in area health education centers.

States have been particularly supportive of primary care and community-based education as strategies to improve access to care in underserved areas (Intergovernmental Health Policy Project 1993).

Recently, with mounting budget pressures, state legislatures have called for more accountability from both medical schools and training programs dependent on state funds. In California, for instance, the General Assembly is demanding that the University of California medical schools reserve at least 50 percent of their residency positions for primary care, or face up to $8 million in funding cuts. In Texas, legislation passed in 1991 created new funding formulas for health-related institutions of higher education that emphasize production of primary care physicians, placement of graduates in underserved areas, and admission of underrepresented minorities (Texas Higher Education Coordinating Board 1992).

Under the reformed system of graduate medical education envisioned by the Commission, as well as under the Administration's health reform proposal, opportunities for states to pursue their own objectives relative to the number or type of residents would be more limited. On the other hand, neither the Commission's nor the Administration's proposal would affect efforts targeted at medical students. States could continue, without interference, to provide loan forgiveness, adopt selective admissions criteria, or impose curriculum requirements such as primary care clerkships.

Assuming that the allocation of residents will be a national rather than a state-level process, there are several options for ensuring that federal decisionmakers are responsive to state concerns and for coordinating state and federal policies. First, states could be assured representation on the national physician work force commission. Second, state officials could be given the opportunity to assist in the development of or comment on the proposed criteria for judging residency programs on the basis of educational quality.

States could also play a role in developing a physician work force that meets population health needs by shifting their support from underwriting the direct costs of medical education to funding efforts that strengthen the quality and competitiveness of their training programs in a national system. That is, under a national all-payer GME financing system, states could channel funds now used for residents' salaries to support curriculum development or faculty recruitment.

Preparedness of Physicians to Practice in a Changing Health System

The shift of delivery from fee-for-service to managed-care arrangements is creating a need for changes in the content of graduate training. Three-fourths of health maintenance organizations responding to a survey by the Group Health Association of America reported that general internists were poorly prepared for practice in managed-care settings. Pediatricians and family practitioners were rated as only somewhat better prepared. New

physicians in these fields were judged as poorly prepared by 62 percent and 51 percent of respondents, respectively (GHAA 1993).

The Commission is also concerned about inadequate exposure of residents to problems in geriatric medicine, an area that will become more important given that persons over 85 are the fastest growing segment of the U.S. population (AARP 1991).

As the delivery system changes, the traditional curriculum offers an increasingly restricted range of educational experiences. In part this reflects the lack of training opportunities in ambulatory settings, an issue the Commission commented on in its 1993 report. But also lacking is the ability of newly trained physicians to understand their role within the context of a broader health system. This deficit relates both to administrative issues, such as practice efficiency, quality improvement, and use of information systems, and to clinical areas—communication skills, the ability to understand issues within the context of populations rather than individual patients, and how to make appropriate referrals and coordinate care (Reinertsen 1993; Inui 1993).

Some managed-care organizations are taking steps to address these deficits. The Harvard Community Health Plan enrolls all new physicians just out of residency in a course covering topics like behavioral medicine, appropriate use of referrals and consultations, performance review and profiling, use of the electronic medical records, and use of practice guidelines (Inui 1993). In the Washington, DC area, Kaiser Permanente provides physicians in its organization with a range of retraining experiences including mentoring; professional enrichment days; and formal courses covering issues such as medical ethics, budgeting, information systems, and planning (Hurley 1993). Such programs, however, are viewed largely as catch-up efforts that will not meet the long-term need to prepare physicians for practice in organized settings and in an environment of constrained resources. This suggests the need to attend to some of these concerns as part of graduate training.

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CHAPTER 14

NONPHYSICIAN PRACTITIONERS

The expanding role of nonphysician practitioners (NPPs) in organized health care settings and the growing emphasis on primary care highlights their importance under health system reform. The Administration's proposal underscored this point by including several provisions targeting specific policy areas related to nonphysician practitioners.[1] These include expanding the scope of practice for NPPs, extending coverage and payment policy, and developing a program to broaden opportunities in graduate nurse education.

To inform its consideration of these issues, the Commission drew from a broad range of sources, including its past work on Medicare payment policy for NPPs. The Commission identified several areas where it could contribute to developing policies for NPPs under health system reform: development of model state practice acts, coverage and payment policy, and improving incentives for NPPs to practice in underserved areas.

RECOMMENDATIONS

Model state practice acts should be developed to set minimum standards for the scope of practice for advanced practice nurses and physician assistants. States should be given a time limit for bringing their laws into compliance after which the model practice acts would be imposed. At their discretion, states could adopt a broader scope of practice than the minimum required by the model acts. The model practice acts should address the issue of collaboration with physicians as it would apply to the different categories of nonphysician practitioners.

Services in the standard benefit package under health system reform should be covered when provided by nonphysician practitioners, as allowed by state law.

The Commission's 1991 recommendations for differentials in payment rates for nonphysicians' services under Medicare should apply to all fee schedules developed under health system reform. Payments should reflect differences in physicians' and nonphysicians' resource costs: work, practice expense, and malpractice expense.

The bonus applied to Medicare payments for physicians' services provided in Health Professional Shortage Areas should also apply at the same percentage

[1] Nonphysician practitioners include advanced practice nurses and physician assistants. Advanced practice nurses are nurse practitioners, clinical nurse specialists, certified nurse-midwives, and certified registered nurse anesthetists.

rate to payments for nonphysician practitioners' services provided in these areas.

This chapter begins with a description of nonphysician practitioners and their professional roles in health care delivery. The discussion focuses on their employment in organized settings, their scope of practice, and their work in underserved areas. The chapter then describes the provisions of the Administration's proposal that pertain to nonphysician practitioners. These provisions include improving state practice acts, revising coverage and payment policy, and changing financing for physician assistant and graduate nurse education. The chapter concludes by describing the Commission's rationale for its recommendations.

PROFESSIONAL CHARACTERISTICS AND ROLES

The Commission used both qualitative and empirical analyses to develop a better understanding of the current role of NPPs in the health care delivery system. First, survey data from three NPP groups—nurse practitioners (NPs), physician assistants (PAs), and certified nurse-midwives (CNMs)—were used to describe the professional roles and characteristics of these groups, such as the types of practices that employ NPPs, their scope of practice, and the care they provide to the underserved.[2] In addition, a Commission study of the current roles of NPs and PAs in organized health delivery systems characterized the management structures of these institutions and the working relationships among physicians and NPPs.

For its empirical analyses of NPs, the Commission used a survey sponsored by the Division of Nursing within the Bureau of Health Professions, Department of Health and Human Services (HHS). This survey of registered nurses (RNs) with advanced or graduate education drew its sample from all nurse practitioners and clinical nurse specialists who are certified by either a national or state certifying body (Washington Consulting Group 1994). The Commission's analyses limited the sample to certified NPs in current practice for whom geographic information was available. The resulting sample size was 1,234 nurse practitioners. Analyses of these data were additionally adjusted for nonresponse.

For its analyses of PAs, the Commission used 1992 annual census data for physician assistants collected by the American Academy of Physician Assistants (AAPA). These data included information for both members and nonmembers of the AAPA.[3] PAs practicing in military hospitals or prisons were removed for this analysis. The resulting sample consisted of 9,628 PAs.

[2] For a discussion of issues pertaining to certified registered nurse anesthetists, see Chapter 11 of the Commission's *Annual Report to Congress* 1993.

[3] Data on nonmembers exist because some members did not renew membership in 1992, but data for 1991 are in the database.

The American College of Nurse-Midwives (ACNM) has undertaken a two-phase survey of nurse-midwifery care to vulnerable populations, funded by the Robert Wood Johnson Foundation. The sampling frame included anyone who had ever applied for nurse-midwife certification or was an associate member of the ACNM. Generally, ACNM applicants and members are RNs with advanced training in midwifery. Survey data were collected in 1991 for 1,879 CNMs, though information was complete only for 1,530.

Overview of Professional Characteristics

A nurse practitioner is a registered nurse who has had, in general, 18 months of training, half of which is in clinical practice. Of slightly more than 200 nurse practitioner training programs in this country, about 80 percent offer master's degrees in nursing; the rest offer certificates at the post-baccalaureate or post-master's level (Mittelstadt 1993). Certification requirements for NPs vary, depending on the state and the specialty. Based on a 1992 national sample of RNs, about 48,200 RNs had formal preparation to practice as nurse practitioners. Of this number, roughly 62 percent have national or state certification, and approximately half are practicing as nurse practitioners (Moses 1994).

Some 29 percent of practicing NPs work in private practices or health maintenance organizations (HMOs), 23 percent work for a hospital outpatient department, and another 23 percent work in public or community health centers (Table 14-1). About 11 percent have an inpatient hospital-based practice as their primary employment setting. Only a very small proportion work in solo nursing practices. Practice arrangements vary, but most practice with a physician on site. Only about 4 percent do not have direct arrangements with a physician. The vast majority of nurse practitioners are paid a fixed salary; just 3 percent are paid on a strictly fee-for-service basis.

A total of 56 programs train physician assistants in primary care. A typical program lasts two years, with the second year consisting of clinical rotations. Of these programs, 84 percent are associated with a university or four-year college, while the rest are with two-year colleges or hospital-based. Academic health centers sponsor about half of the PA training programs. Certification required for practice in 42 states is obtained by graduating from a program approved by the American Medical Association and passing a national certifying examination (Oliver 1992). There are currently 23,000 practicing PAs (Cawley 1993).

Most PAs work in ambulatory care settings, while about 29 percent work in inpatient hospital settings (Table 14-2). About 42 percent work in primary care, while 25 percent work as surgical specialists.

A certified nurse-midwife is a registered nurse with advanced training in midwifery who is certified by the ACNM. Certification is recognized in all 50 states and the District of Columbia, although states have their own licensing mechanisms. There are 30 nurse-

Table 14-1. Nurse Practitioners' Practice Characteristics (percentage)

Practice Setting	
Public/community health center	23.2
Hospital outpatient/clinic	23.0
Private group physician practice	11.9
Hospital inpatient	11.0
Student health services	7.2
Private solo physician practice	7.3
Health maintenance organization	7.0
Nursing home/rehabilitation	1.7
Private group nurse practice	1.0
Private joint practice	0.8
Private solo nurse practice	0.7
Walk-in center	0.3
Other*	4.7
Practice Arrangement	
Physician on-site	61.4
Written protocols	22.0
Physician by telecommunication	12.6
Physician available for paid consultation	2.3
No physician involvement	1.7
Financial Arrangement	
Fixed salary	80.8
Fixed salary plus potential for additional benefits	12.0
Fixed salary plus fee for service	4.1
Fee for service	3.1

SOURCE: Physician Payment Review Commission analysis of Department of Health and Human Services 1992 Survey of Certified Nurse Practitioners and Clinical Nurse Specialists.

* Includes educational settings, occupational health, and prisons.

NOTE: Percentages may not add to 100 due to rounding.

midwifery programs, most of which lead to a master's degree (Fowkes et al. 1993; Rodos and Huslig 1991). The ACNM estimates there are 3,500 to 4,000 certified nurse-midwives now practicing (Bash 1993).

Certified nurse-midwives may work in more than one site. Major sites are hospitals, private offices, and public clinics (Table 14-3). Nearly 10 percent practice in birthing centers and HMOs.

Table 14-2. Physician Assistants' Practice Characteristics (percentage)

Specialty	
Primary care[a]	42.4
Medical specialists[b]	25.4
Surgical specialists[c]	25.4
Obstetrician-gynecologists	4.4
Other[d]	2.5
Practice Setting	
Hospital	29.2
Group physician office practice	25.7
Clinic	23.5
Solo physician office practice	12.6
Health maintenance organization/managed care	8.4
Other	0.7

SOURCE: Physician Payment Review Commission analysis of the American Academy of Physician Assistants 1992 General Census Data on Physician Assistants.

[a] Family/general practice, general internal medicine, and general pediatrics.

[b] Allergy, dermatology, emergency medicine, geriatrics, internal medicine subspecialty, neurology, occupational medicine, pediatric subspecialty, psychiatry, and rehabilitation.

[c] General surgery, surgery, ophthalmology, orthopedics, and otolaryngology.

[d] Anesthesiology, pathology, and radiology.

NOTE: Percentages may not add to 100 due to rounding.

The Role of NPs and PAs in Organized Care Settings

The Commission contracted with RAND to conduct a qualitative study examining the roles of nurse practitioners and physician assistants in group practices and in HMOs.[4] Using a case study approach, the study examined five HMOs and three multispecialty group practices that represented a range of organizational types and approaches for employing physician assistants and nurse practitioners. The sites were selected to include states with varied legislative stringency regarding NP or PA practice.

This study had several limitations common to most qualitative studies. First, the sample relied on large organizations with a national reputation for employing NPs and PAs. Second, the findings were limited to respondents' self-reports. Finally, the interview sample was not random, since the NPs and PAs were selected by each organization. Nonetheless, the consistent responses in on-site interviews and, where possible, confirmation of conclusions

[4] The researchers responsible for this study were Peter D. Jacobson, Louise E. Parker, and Ian Coulter.

Table 14-3. Certified Nurse-Midwives' Practice Setting (percentage)

Hospital based	43.1
Private office	41.9
Public clinic	37.1
Birthing center	9.5
Prepaid group health maintenance organization	9.2

SOURCE: Physician Payment Review Commission analysis of American College of Nurse-Midwives 1991 survey data.

NOTE: The total percentage exceeds 100 due to the nature of the survey question.

with empirical findings suggest these findings accurately reflect current practices in organized settings.

Professional Roles. The study looked at the roles of NPs and PAs in caring for patients and how they contrasted with that of physicians. It found that the organizations viewed NPs and PAs as interchangeable. Each group was expected to be able to perform a comparable range of tasks. NPs and PAs, however, perceived their roles differently. When asked to list tasks, PAs tended to name more that were technical in nature, such as suturing and minor biopsies; NPs, by contrast, were inclined to list more nursing-related tasks that were broader in scope, such as health prevention and education.

On the other hand, the study found that the differences between NPPs and physicians was in the role each health care professional plays, not in the specific tasks performed. It concluded that while NPs, PAs, and physicians perform similar tasks in providing care, physicians retain an important intangible role of professional accountability and responsibility for the patient.

Two limitations in nurse practitioners' and physician assistants' roles applied across the sample sites: neither type of practitioner had hospital admitting privileges or provided care to their patients in an inpatient setting. Furthermore, NPs and PAs generally did not treat elderly patients with complicated illnesses or patients with multiple system disorders. Another common limitation was that most plans restricted NPs and PAs to normal business hours, relying exclusively on physicians for after-hours and weekend duty.

One aspect of organizational structure that the study found consistent across settings was that the determination of the roles of physicians, NPs, and PAs (i.e., the division of labor) was decentralized and decided at the clinic or department level. At most sites, there appeared to be few formal guidelines and, until recently, little planning for how NPs and PAs are integrated into the organization. For the most part, clinics were pragmatic: whatever needed to be done was performed by the available practitioner, within certain limits. One consequence of this decentralization is that NPs and PAs may be used as primary care practitioners in one department, as specialty care practitioners in another, or they may not be used at all.

Management Style within Organizations. The three management styles for task delegation and patient assignment to NPs and PAs were identified as traditional, team, and panel approaches. In the traditional approach, NPs and PAs are assigned to a supervising physician or a small group of physicians. Patients, in turn, are assigned to physicians, who then delegate tasks to NPs and PAs. NPs and PAs generally do not have the initial contact with patients.

Under the team approach, patients are assigned to teams that include physicians and NPPs. A patient is always given to a primary care physician, but a nurse practitioner or physician assistant may also share in the care of the patient. This approach tends to be highly collaborative, with considerable interaction among physicians, NPs, and PAs. In settings using this management style, NPs and PAs may be the initial patient contact.

Under the panel approach, patients are assigned to either an NP, a PA, or a physician. The NPP to whom the patient is assigned has responsibility for meeting the patient's health care needs, but may refer the patient to a physician, if necessary.

Commission analysis of the survey of nurse practitioners, described earlier, shows that about 69 percent have primary responsibility for a specific group of patients under either a team or a panel approach (Table 14-4). In both physician solo and group practices, about 60 percent of NPs have primary responsibility for a specific group of patients, nearly the same proportion (57 percent) found in HMOs.

Working relationships among NPs, PAs, and physicians were consistently described as collaborative. Whether the management style was a panel or the more traditional approach, physicians, NPs, and PAs described their interactions as collaborative and collegial.

Patient assignment or triage varied across the sites visited. In most organizations, patient assignment at the primary care clinic was done by a receptionist, appointment clerk, or triage nurse (usually, but not always an RN) who screened patients. At clinics using a traditional

Table 14-4. Nurse Practitioners Having Primary Responsibility for a Specific Group of Patients (percentage)

Total (all ambulatory settings)	68.8
Public/community health center	72.2
Private physician group practice	61.5
Private physician solo practice	60.1
Health maintenance organization	56.8
Private nursing practice	87.8

SOURCE: Physician Payment Review Commission analysis of Department of Health and Human Services 1992 Survey of Certified Nurse Practitioners and Clinical Nurse Specialists.

management style, patients generally were first assigned to see the physician, who would then determine how the NP or PA should be involved.

In departments or clinics using team or panel approaches, the intake personnel were likely to assign patients to their primary care practitioner (either an NP, PA, or a physician). In cases where the patient's primary care practitioner was a physician, but was not available, the patient would be offered an appointment with an available NP or PA. Patients with multisystem dysfunctions, complications that might require an inpatient hospital admission, or problems meeting other plan guidelines were referred directly to a physician. In addition, patients who preferred to see an NP, PA, or a physician were usually given their choice. Patients were also directed to NPs or PAs, depending on the subspecialty of either practitioner. Otherwise, they were assigned based on the practitioner's availability. In some clinics using a team approach, practitioners jointly decided how to triage patients. Based on an understanding of its team members' talents and interests—for example, whether a PA was skilled at suturing or an NP was adept at dealing with AIDS patients—the intake personnel attempted to channel patients to the most appropriate practitioner.

Scope of Practice

The scopes of practice of the NPP professional groups are defined differently within each state and for each professional group. The restrictiveness of the legal boundaries that define the scope of an NPP's practice vary substantially across states.[5] The effects of these legal boundaries on actual practice are less clear. For example, the RAND case study interviews found that despite these state laws, the tasks NPs and PAs performed were largely determined by the clinical needs of a given situation rather than by legal statute, administrative fiat, or professional status. An HMO medical director noted that the scope of practice depended on individual capabilities and the degree of trust shared by the health professionals.

The survey of nurse practitioners provides detailed information about actual prescribing practices. This allows analyses of how actual practice relates to state restrictions on prescriptive authority. In general, states regulate prescriptive authority under one of three types: dependent, independent, and none (Pearson 1993). Prescriptive authority is dependent if it requires a physician's signature for the prescription, it is a delegated medical act, or gives the state board of medicine some authority over the regulations that permit NPs to prescribe medication. Independent prescribing authority requires none of these. Twenty-one states plus the District of Columbia permit independent prescribing authority for nurse practitioners; 21 states have dependent prescribing authority, and 8 grant no prescribing authority (Pearson 1993).

[5] The restrictiveness of states' laws and regulations governing NPPs can be defined by the way they address legal authority, drug prescriptive authority, and payment. Legal authority encompasses characteristics of the board that regulates the NPPs and specific regulations invoked by these boards. A 1991 survey of states' legislation for nurse practitioners found that of 50 states and the District of Columbia, 37 promulgated regulations through a board of nursing, 8 provided a broad act that defined nurse practitioners, while 6 others provided regulations through both the state boards of nursing and medicine (Pearson 1993).

Within these broad classifications there remain substantial differences across the states. For example, states with independent prescribing authority vary according to such policies as whether they regulate the number of refills allowed or permit prescriptions for controlled substances. States with dependent prescribing authority vary substantially because of different requirements placed on the supervising physician.

States do not always adopt the same policies across the NPP professional groups. For example, 43 states grant prescriptive authority to nurse practitioners, but only 34 do so for physician assistants (Cawley 1993). Commission analysis of the nurse practitioner survey, however, shows that for most drugs studied, a majority of NPs prescribe even in states that do not grant authority (Table 14-5). In states granting no prescriptive authority, more than 70 percent of NPs prescribe antihistamines and decongestants, anti-inflammatory agents, and antimicrobials. Diabetic preparations had the lowest rate (45 percent) of NPs prescribing without authority.

The actual prescribing practices vary by the type of drug and the authority the states grant (Table 14-6). This is not surprising since many states regulate the type of drugs NPs may prescribe and the level of physician involvement. On the other hand, even in states permitting independent prescriptive authority, consultation with a physician often occurs. Depending on the type of drug, anywhere from 17 percent to 41 percent of nurse practitioners consult with a physician about the prescriptions.

The empirical findings from the survey of nurse practitioners are consistent with results from the case studies, which found health professionals in organized care settings were able to work around the legal boundaries affecting prescriptive authority in their state. Distinctions were made between formal and informal prescribing authority. The extent to which NPs' and PAs' prescriptions were supervised or monitored varied substantially across organizations. In some situations, all medications had to be approved or countersigned by the physician. In others, there was a blanket approval for most drugs; the doctor's name was on the order, but the request might or might not be formally reviewed. The NPs and PAs did not have prescriptive authority for narcotics in any of the sites visited. While some NPs and PAs clearly chafed at the formal restrictions, most said that they had considerable latitude to prescribe medication.

Role of NPPs in Caring for Underserved Populations

The potential for NPPs to meet the needs of underserved populations has been a major factor in encouraging their training over the past two decades. NPPs do treat many patients who have traditionally faced barriers in obtaining health care. Yet many of the same factors that make it difficult to recruit physicians to underserved areas, such as professional and personal isolation, influence the location decisions of NPPs as well (Sargent 1987; Rodos and Huslig 1991). The relative scarcity of physicians in such areas further deters NPPs, particularly PAs, from choosing a location where little physician back-up is available.

Table 14-5. Nurse Practitioners' Prescribing Practices by State Prescriptive Authority and by Type of Drug (percentage)

Type of Drug*	No Prescriptive Authority	Dependent Prescriptive Authority	Independent Prescriptive Authority
Antihistamines/Decongestants			
Prescribe	72.1	81.2	88.0
Not allowed by law	21.3	8.7	5.1
Practice setting restrictions	5.2	8.5	6.1
Do not have education/experience	1.5	1.6	0.8
Anti-Inflammatory Agents			
Prescribe	74.2	81.7	89.8
Not allowed by law	20.7	8.4	5.1
Practice setting restrictions	3.7	8.5	3.9
Do not have education/experience	1.4	1.4	1.3
Antimicrobials			
Prescribe	70.1	84.0	91.9
Not allowed by law	24.9	8.1	5.0
Practice setting restrictions	3.5	6.9	2.6
Do not have education/experience	1.5	1.0	0.5
Antihypertensives			
Prescribe	52.8	59.4	68.0
Not allowed by law	29.2	13.4	8.6
Practice setting restrictions	12.8	19.2	15.7
Do not have education/experience	5.2	7.9	7.8
Contraceptives			
Prescribe	63.0	74.3	78.3
Not allowed by law	27.1	10.1	6.5
Practice setting restrictions	6.2	12.9	11.2
Do not have education/experience	3.7	2.7	4.0
Diabetic Preparations			
Prescribe	45.1	58.0	60.6
Not allowed by law	33.5	13.0	7.8
Practice setting restrictions	10.3	21.1	18.1
Do not have education/experience	11.1	8.0	13.5

SOURCE: Physician Payment Review Commission analysis of Department of Health and Human Services 1992 Survey of Certified Nurse Practitioners and Clinical Nurse Specialists.

*These drugs were selected from a broader list included in the survey.

NOTES: Percentages are calculated only for those nurse practitoners for whom the drug is applicable to their practice. Percentages may not add to 100 due to rounding.

Previous research suggests that NPPs are active in caring for population groups that have traditionally faced barriers in obtaining health care. Certified nurse-midwives serve a disproportionate number of the poor, minorities, and residents of inner-city and rural areas (Institute of Medicine 1988). They have proven effective in caring for pregnant women at

Table 14-6. Nurse Practitioners' Method of Prescribing by State Prescriptive Authority and by Type of Drug (percentage)

Type of Drug*	No Prescriptive Authority	Dependent Prescriptive Authority	Independent Prescriptive Authority
Antihistamines/Decongestants			
Prescribe independently/no physician consultation	16.2	33.6	54.3
Prescribe independently/physician consultation	17.9	16.4	16.6
Prescribe by protocol	20.4	22.4	12.1
Prescribe by formulary	2.2	4.7	4.4
Physician signature after consultation	30.0	13.8	10.4
Verbally call-in to pharmacy	13.3	9.2	2.3
Anti-Inflammatory Agents			
Prescribe independently/no physician consultation	5.7	28.9	49.3
Prescribe independently/physician consultation	21.5	19.0	18.7
Prescribe by protocol	25.9	22.8	15.3
Prescribe by formulary	2.0	4.6	4.2
Physician signature after consultation	32.5	16.0	10.0
Verbally call-in to pharmacy	12.3	8.8	2.5
Antimicrobials			
Prescribe independently/no physician consultation	11.3	25.4	40.9
Prescribe independently/physician consultation	20.4	19.9	25.1
Prescribe by protocol	21.5	26.0	17.1
Prescribe by formulary	2.1	4.4	3.7
Physician signature after consultation	34.3	15.6	10.9
Verbally call-in to pharmacy	10.3	8.7	2.3
Antihypertensives			
Prescribe independently/no physician consultation	3.0	16.8	26.1
Prescribe independently/physician consultation	21.2	28.2	41.1
Prescribe by protocol	17.4	19.1	9.2
Prescribe by formulary	0.0	1.6	5.8
Physician signature after consultation	47.3	24.0	16.3
Verbally call-in to pharmacy	11.0	10.3	1.5
Contraceptives			
Prescribe independently/no physician consultation	16.7	26.4	55.8
Prescribe independently/physician consultation	20.6	14.4	16.0
Prescribe by protocol	37.0	33.2	16.2
Prescribe by formulary	5.6	5.6	2.9
Physician signature after consultation	10.9	10.4	7.0
Verbally call-in to pharmacy	9.2	10.0	2.1
Diabetic Preparations			
Prescribe independently/no physician consultation	3.9	13.4	25.2
Prescribe independently/physician consultation	18.8	30.1	42.2
Prescribe by protocol	18.8	18.9	12.0
Prescribe by formulary	0.0	1.7	4.4
Physician signature after consultation	44.3	25.4	14.0
Verbally call-in to pharmacy	14.3	10.4	2.2

SOURCE: Physician Payment Review Commission analysis of Department of Health and Human Services 1992 Survey of Certified Nurse Practitioners and Clinical Nurse Specialists.

*These drugs were selected from a broader list included in the survey.

NOTES: Percentages are calculated only for those nurse practitioners who prescribe the drug as part of their practice. Percentages may not add to 100 due to rounding.

high risk because of socioeconomic factors, and have been important in increasing access within this population, since many public clinics that serve the poor experience difficulty in attracting physicians, particularly obstetricians (Rosenbaum 1986; Institute of Medicine 1989). Studies have shown that NPs are particularly valuable in school settings providing primary care services to previously unserved children (OTA 1986).

Commission Analysis of Survey Data. The Commission used the recent survey data on NPs, PAs, and CNMs to examine the extent to which NPPs are currently practicing in underserved areas and to identify the specialties and settings in which these providers work. Variation in survey instruments and data collection methods, however, make comparisons difficult. To improve comparisons, subgroups of practitioners such as those providing primary care or obstetrical-gynecological services were identified.

Presence in Underserved Areas. Geographic location was determined by matching the ZIP codes of the survey respondents' primary practice locations to measures of underserved areas. Four types of underserved areas were considered: high-poverty areas, rural areas, and urban and rural Health Professional Shortage Areas (HPSAs).[6] Urban and rural areas were identified by whether the ZIP code was located within or outside of a metropolitan statistical area. High-poverty areas were defined as those ZIP codes in which 30 percent or more of the population was below poverty based on 1990 census information.

Some have suggested that NPPs play a proportionally greater role in caring for underserved populations than do physicians. Adding analyses of the physicians in the 1992 Medicare directory of unique physician identification numbers (UPIN) allowed comparisons of the role each group performs. The directory contains information on 225,702 physicians in solo and group practice who submit claims to Medicare.[7] Physicians practicing solely within prepaid capitation systems and residents are therefore not included in the sample. Since HPSAs are largely based on the primary care physician-to-population ratio, physician distribution by HPSA should simply validate their scarcity in these areas. Yet looking at HPSAs may be particularly useful in determining whether NPPs are practicing in different areas than physicians.

Compared with physicians, greater proportions of NPs and CNMs are found in urban HPSAs and high-poverty areas, while a higher proportion of PAs are found in rural HPSAs and other rural areas (Table 14-7). Primary care physicians are the most relevant comparison to NPPs because of the similarity of their roles, particularly in rural areas.

[6] Three criteria are used to define HPSAs. First, the geographic area must be rational for the delivery of health services. Second, the population-to-primary care physician ratio must exceed 3500:1, or be above 3000:1 and qualify based on unusually high needs for primary care services (defined as more than 100 births per year per 1000 women age 15 to 44, more than 20 infant deaths per 1000 live births, or more than 20 percent of the population with incomes below the poverty line) or insufficient capacity of existing primary care providers. Third, resources in contiguous areas must be shown to be overutilized, excessively distant, or inaccessible (HCFA 1980).

[7] Because pediatricians are underrepresented in Medicare, pediatric specialties were excluded from the comparisons of primary care practitioners.

Table 14-7. Practitioner Groups in Underserved Areas (percentage)

Practitioner Group	High Poverty	Total HPSA	Rural HPSA	Urban HPSA	Rural
Nurse Practitioner					
Total[a]	16.1	8.6	3.3	5.4	16.2
Primary care[b]	13.6	9.7	4.0[e]	5.7	19.2
Obstetrical-gynecological	13.3	6.9	[f]	[f]	22.2
Physician Assistant					
Total	10.5[e]	7.6	4.1	3.5[e]	19.7
Primary care[c]	8.7[e]	12.3	9.1	3.3[e]	31.6
Obstetrical-gynecological	11.3[e]	5.9[e]	[f]	[f]	13.3[e]
Certified Nurse-Midwife	18.8	8.4	2.7	5.7	15.7
Physician					
Total	10.3	5.5	2.1	3.4	14.8
Primary care[d]	9.4	7.5	3.9	3.6	20.6
Obstetrical-gynecological	10.3	4.3	1.1	3.2	12.1

SOURCE: Physician Payment Review Commission analysis of 1992 UPIN Public Use File; Department of Health and Human Services 1992 Survey of Certified Nurse Practitioners and Clinical Nurse Specialists; American Academy of Physician Assistants 1992 Census Data on Physician Assistants; American College of Nurse-Midwives 1991 survey data.

[a] Educational settings excluded.

[b] Includes only ambulatory settings.

[c] General/family practice, and general internal medicine.

[d] General practice, family practice, and internal medicine.

[e] Distribution is not statistically different from physician comparison group at the 0.01 level.

[f] Sample size too small to make reliable comparisons.

NOTE: Underserved areas include ZIP codes in which 30 percent or more of the population is below poverty (high poverty), urban and rural Health Professional Shortage Areas (HPSAs), and areas that fall outside of metropolitan statistical areas (rural).

Differences among practitioner groups in underserved areas are greatest for CNMs and obstetrician-gynecologists. Nearly 19 percent of CNMs provide care in high-poverty areas, compared with 10 percent of obstetrician-gynecologists. Comparisons of nurse practitioners and primary care physicians are less dramatic. About 14 percent of primary care NPs serve in poverty areas, compared with slightly more than 9 percent of physicians. In general, the practice locations of the physician assistants closely resemble that of physicians.

Across all practitioner groups, the proportions serving in high-poverty and rural areas are relatively low. Therefore, merely increasing the supply of health professionals would be a costly approach to increasing access for the underserved.

Vulnerable Populations. Self-reported information about the patients they serve was also available for NPs and CNMs. About 66 percent of NPs reported more than one-quarter of their patients as nonwhite, and about 46 percent of NPs reported serving more than half nonwhite patients. Additionally, 44 percent of NPs estimated that more than one-quarter of their patients were Medicaid beneficiaries, and 28 percent estimated that more than half were Medicaid beneficiaries.

Approximately 89 percent of the CNMs said they serve low-income women; about 80 percent reported serving uninsured women. In contrast to the 6 percent of CNMs located in urban HPSAs, 21 percent indicated that at least 90 percent of their patients lived in inner-city or low-income areas; 13 percent said their entire patient population lived in such areas.

Practice Setting in Underserved Areas. To better understand the practices of NPPs working in underserved areas, practice settings were examined by geographic location. In general, NPP practice settings in underserved areas reflect the role these practitioners play in serving vulnerable populations (Tables 14-8, 14-9, 14-10). In high-poverty areas, the NPs, PAs, and CNMs are found predominantly in clinics. In rural HPSAs, more than one-third of the NPs practice in rural health centers. In urban HPSAs, nearly one-third practice in community health or family planning centers. This undoubtedly reflects the importance of these centers in meeting the health care needs of people in these areas. PAs and CNMs also work primarily in public clinics in underserved communities.

Scope of Practice. Legal prescriptive authority is sometimes viewed as a potential barrier to practice, and therefore could limit NPPs from caring for the underserved (Safriet 1992; Pearson 1993). The Commission, therefore, used the survey of nurse practitioners to examine whether the percentage of NPs in underserved areas differed depending on whether states gave them the legal authority to prescribe medications (Table 14-11). Estimated percentages were adjusted to control for population size in each state's underserved areas.

The type of prescriptive authority a state allows is related to the number of NPs practicing in rural areas. Only about 7 percent of NPs in a state with no prescribing authority for NPs practice in rural areas compared to over 17 percent in states with dependent or independent prescriptive authority (Table 14-11). No statistically significant differences were found for high poverty areas or HPSAs.

NONPHYSICIAN PRACTITIONERS AND HEALTH SYSTEM REFORM

The Administration's health system reform proposal includes provisions that may have a profound impact on NPPs. The issues addressed, however, are not intrinsic to the particular structure of reform proposed, but reflect universal issues for NPPs. The same issues have faced policymakers before: defining the scope of practice for NPPs, developing payment policy, and determining the composition of the health professional work force.

Table 14-8. Nurse Practitioners' Practice Settings in Underserved Areas (percentage)

Setting	Total	High Poverty	HPSA	Rural HPSA	Urban HPSA
Private/HMO	29.1	14.6	15.3	18.9	13.2
Group physician practice	11.9	5.2	5.4	3.6	6.5
Solo physician practice	7.3	1.5	9.0	15.3	5.3
Health maintenance organization	7.0	6.6	0.9	0.0	1.5
Other	2.9	1.3	0.0	0.0	0.0
Public/Community Health	23.2	24.9	49.3	65.8	39.8
County/city department clinic	5.9	7.7	8.0	10.8	6.4
Community/neighborhood center	5.8	9.5	17.2	9.2	21.7
Family planning center	5.2	2.8	6.0	0.0	9.5
Rural health center	2.7	3.6	14.6	36.8	a
State health department	2.0	0.6	3.3	9.0	0.0
Hospital Outpatient/Clinic	23.0	32.1	14.2	3.1	20.5
Hospital Inpatient	11.0	15.0	8.7	3.1	11.8
Student Health Service	7.2	6.0	7.1	0.0	11.2
Other[b]	6.4	7.4	5.5	9.1	3.5

SOURCE: Physician Payment Review Commission analysis of Department of Health and Human Services 1992 Survey of Certified Nurse Practitioners and Clinical Nurse Specialists.

[a] Not applicable.

[b] Includes educational settings, occupational health, nursing homes, and prisons.

NOTES: Percentages may not add to 100 due to rounding. Underserved areas include ZIP codes in which 30 percent or more of the population is below poverty (high poverty) and Health Professional Shortage Areas (HPSAs).

The role of NPPs under health reform may largely depend on the state in which the NPP practices. Under the provisions of the Administration's proposal, services are covered for all health professionals legally authorized to practice in the state. The Administration's proposal, however, would override any state practice act that restricts practices beyond "what is justified by the skills and training of such professionals." This proposal also provides for the development of model state practice acts, acknowledging the wide variety and diversity of current practice acts and providing the potential for some uniform standards. Other provisions that pertain to NPPs change Medicare payment policy and financing for NPP education.

The Commission first made recommendations on NPP issues in 1991. The Omnibus Budget Reconciliation Act of 1989 mandated that the Commission study the implications of applying a resource-based fee schedule for physicians' services to NPPs. The Commission made

Table 14-9. Physician Assistants' Specialty and Practice Settings in Underserved Areas (percentage)

	Total	High Poverty	Total HPSA	Urban HPSA	Rural HPSA
Specialty					
Primary care[a]	42.4	36.8	66.0	41.2	87.0
Medical specialty[b]	25.4	29.8	18.9	29.2	10.2
Surgical specialty[c]	25.4	26.1	11.0	21.9	1.8
Obstetrician-gynecologist	4.4	4.8	3.4	6.8	0.5
Other[d]	2.5	2.5	0.7	0.9	0.5
Practice Setting					
Group office	25.7	15.6	17.8	21.2	15.0
Clinic	23.5	31.8	48.8	32.1	62.6
Private hospital	15.1	17.1	10.0	19.6	2.1
Public hospital	14.1	20.9	9.5	14.3	5.4
Solo office	12.6	7.2	11.1	7.5	14.2
Health maintenance organization	8.4	7.1	2.4	5.0	0.3
Other	0.7	0.4	0.4	0.3	0.5

SOURCE: Physician Payment Review Commission analysis of the American Academy of Physician Assistants 1992 General Census Data on Physician Assistants.

[a] Family/general practice, general internal medicine, and general pediatrics.

[b] Allergy, dermatology, emergency medicine, geriatrics, internal medicine subspecialty, neurology, occupational medicine, pediatric subspecialty, psychiatry, and rehabilitation.

[c] General surgery, surgery, ophthalmology, orthopedics, and otolaryngology.

[d] Anesthesiology, pathology, and radiology.

NOTES: Percentages may not add to 100 due to rounding. Underserved areas include ZIP codes in which 30 percent or more of the population is below poverty (high poverty) and Health Professional Shortage Areas (HPSAs).

recommendations intended to resolve inconsistencies in payment policies that resulted from a series of incremental decisions concerning coverage and payment levels for NPP services in particular sites. These recommendations have not been acted upon.

This year, the Commission focused on policy issues emphasized by the Administration's health reform proposal. The rationale for the Commission's recommendations is presented below. First, the use of state practice acts to define NPP scope of practice and the development of model practice acts is discussed, followed by coverage and payment issues. Next, financing graduate NPP education and providing bonus payments to help improve access to health care for the underserved are considered.

Table 14-10. Certified Nurse-Midwives' Practice Settings in Underserved Areas (percentage)

Setting	Total	High Poverty	Total HPSA	Urban HPSA	Rural HPSA
Hospital	43.1	56.6	52.3	56.3	43.9
Private office	41.9	22.6	22.7	17.2	34.2
Public clinic	37.1	46.2	59.4	52.9	73.2
Birthing center	9.5	9.0	8.6	6.9	12.2
Prepaid group	9.2	4.9	1.6	2.3	0.0

SOURCE: Physician Payment Review Commission analysis of American College of Nurse-Midwives 1991 survey data.

NOTES: Percentages may not add to 100 due to rounding. Underserved areas include ZIP codes in which 30 percent or more of the population is below poverty (high poverty) and Health Professional Shortage Areas (HPSAs).

Table 14-11. Nurse Practitioners in Underserved Areas' by the State's Type of Prescribing Authority (estimated percentage)

Type of Prescribing Authority	High Poverty[a]	HPSA	Rural[b]
No authority	19.6	8.2	6.6
Dependent	15.2	10.0	18.1
Independent	16.6	8.8	17.5

SOURCE: Physician Payment Review Commission analysis of Department of Health and Human Services 1992 Survey of Certified Nurse Practitioners and Clinical Nurse Specialists.

[a] Defined as 30 percent or more of the population below the income threshold for poverty.

[b] Statistically significant at the 0.01 level.

NOTE: These estimates control for the proportion of the state's population which lives in high poverty areas, Health Professional Shortage Areas (HPSAs), or rural areas respectively.

Scope of Practice and State Practice Acts

As mentioned earlier, state practice acts vary tremendously both in regulatory approach and in the scope of practice they authorize. Case studies of care provided in organized settings and confirmed by empirical analyses suggest that state practice acts are not always fully

effective. State practice acts may influence the formal prescriptive authority and the administrative protocols organizations develop. Within each organization, however, regardless of state restrictions, NPPs have wide latitude for prescribing. Although practice acts are intended to ensure quality of care, these organizations provide their own controls on quality, rather than relying on state practice acts to set their standards.

Although state practice acts may provide a weak mechanism for guiding actual practices within a state, they play an important role in defining professions. And since these acts can present a real threat of litigation for NPPs and physicians when practicing within a state, they cannot simply be ignored.[8] The development of model state practice acts could give states an alternative that, if developed with input from all affected groups, would represent a national consensus.

Developing model state practice acts as a first priority under health system reform has several advantages. The models would provide states with alternative legislation or guidelines for revision of restrictive laws. In addition, if states continued to enforce unnecessarily restrictive practice acts, the model practice acts could serve as an override. This approach would avoid the potential confusion that the Administration's proposal presents by overriding states' practice acts before providing an alternative to states or guidelines for the courts.

The development of model state practice acts could provide additional benefits as well. This process could identify styles of practice and collaboration between NPPs and physicians that enhance patient outcomes. The Commission's study identified several styles of collaborative practice used across HMOs and multispecialty clinics. Within a single organization, different practice styles were adopted by the various departments and clinics according to their particular needs. Hence, requirements for collaboration, rather than imposing a rigid administrative burden, could allow for flexible mechanisms for professional support that vary according to the practice setting.

Successful collaborative practices and organizational structures have also been identified in inpatient settings. One study of physicians and nurses in intensive care units, for instance, identified certain organizational attributes that were associated with positive health outcomes. These attributes were having a senior nurse available who was not also needed for direct patient care, developing clearly defined patient-care protocols to promote autonomy, and having the same physician make rounds each day and be available for consultation. These units also had good communication between physicians and nurses (Knaus et al. 1986).

A project at Beth Israel Hospital in Boston is another example of a style of collaboration that improves the quality of care patients receive. An interdisciplinary case review format was developed in which patients with adverse outcomes were presented to a group attended by

[8] For example, although practitioners can get around state practice acts by having physicians sign pads of prescriptions, this activity is illegal and puts the practitioners at risk of litigation.

nurses and physicians. These reviews allowed group problem solving while identifying weaknesses in systems or patterns of care. As this pilot expands, its long-term success can be evaluated (Pike et al. 1993).

Coverage and Payment

The Administration's proposal changes payment policy for NPPs in general as well as under the Medicare program. All services in the benefit package that NPPs provide, as allowed by state law, would be covered. Payment to NPPs would depend on contractual arrangements made with health plans. How much an NPP would receive under fee-for-service arrangements would depend on negotiations about the fee schedule within each alliance. The Commission concurs with the Administration's proposal to cover the services in the standard benefit package that NPPs provide in accordance with state law.

Current Payment Policies for NPPs under Medicare. Currently, Medicare payment levels and the method of payment depend on the location of the service and the setting. For example, nurse practitioners may receive direct payment from Medicare for services provided in rural areas. The nurse practitioner is paid up to 75 percent of the physician fee for hospital services, and at most 85 percent of the physician fee for all other services. For care delivered in a nursing facility, the NP's employer receives no more than 85 fee of the physician's payment. Employers of physician assistants receive 85 percent of the physician payment for services provided in a rural HPSA. Payments made to a hospital and nursing facility for PA services vary by the type and location of the service. Neither NPs nor PAs are paid for services provided in urban HPSAs except when incident to a physician's care.

Medicare pays physicians for the services of many NPPs according to the "incident to" provision. Under this provision, Medicare pays the full physician amount for services provided under the physician's supervision. These services may cover a wide range of activities from minor surgery to visits. If necessary, the physician must be available for immediate assistance. Medicare claims do not distinguish the services provided by the physician from those furnished by an NPP incident to the physician.

The Administration's Proposed Changes to Payment for NPPs. The Administration's proposal makes explicit changes to Medicare payment policy for NPPs. As part of the general reform, all limitations would be removed, so that all services provided by NPPs, as allowed by state law, would be covered.[9] The proposed change would permit nurse practitioners or their employers to receive direct payment for services, whether these were provided in a rural or an urban area. For example, Medicare currently pays a nurse practitioner for services in

[9] Nurse practitioner services provided to an inpatient of a hospital would not be covered. Services of a clinical nurse specialist are not covered if furnished to an inpatient of a hospital, skilled nursing facility, or a nursing facility. Presumably, these services are already reflected in Part A payments that the institutions receive.

rural areas, while in urban areas, the same services are covered only if incident to those provided by a physician. The change in legislation would allow nurse practitioners or their employers to receive direct payment for services, regardless of the area. In these instances, payment would be at the NPP rate rather than the physician's rate.

At this time Medicare requires physician assistants to be supervised by a physician and nurse practitioners and clinical nurse specialists to collaborate with a physician. This would still be the case under the Administration's proposal. Therefore, although the proposed changes would allow direct payment to some nurse practitioners and clinical nurse specialists, these changes would not allow nonphysician practitioners to practice in isolation.

Rationale for Recommendations about Payment. The Commission reviewed its 1991 recommendations for payment to NPPs and found that they apply broadly under health reform as well. It continues to recommend that fee-for-service payments to NPPs reflect differences in physicians' and nonphysicians' resource costs. Percentage differentials would then be applied to the physicians' fee schedule. The Commission does not assume that the services provided by various health professionals are the same although a common coding convention is used. For example, a physician and a nurse practitioner might each use the same code for an established patient office visit, but the services they provide during that visit may be intrinsically different. The Commission continues to believe differential payments should, therefore, reflect differences in resource costs for the health professions, with separate adjustments for each of work, practice expense, and professional liability.[10]

Financing Education

The Administration's proposal would establish a graduate nurse training program equivalent to the one established for graduate medical education. It would allocate $200 million toward programs for nurse practitioners, nurse-midwives, nurse anesthetists, and clinical nurse specialists. A Council of Nurses would administer the program in a similar fashion to the Council on Graduate Medical Education. The requirement for a minimum of 55 percent of trainees completing programs in primary care would apply to the graduate nurse education program as well.

Under the Administration's proposal, training of physician assistants would continue to rely on discretionary funds. Total authorizations of $400 million would be made for training PAs, retraining physicians, training underrepresented minorities and disadvantaged persons,

[10] Setting a differential for work requires deciding whether to set NPP rates according to the rate of return of postgraduate education for physicians or for other professionals. Physicians and attorneys have realized higher rates of return among those with postgraduate education. It was estimated that physician incomes would be 19 percent lower if they earned the same rate of return realized by other professionals (Willke and Marder 1987). The Commission estimated that the work differential for physician assistants would be 0.87 if based on the rate of return for physicians and 0.75 if based on that for other professionals (PPRC 1991).

training nurses, and developing the model practice acts. Owing to fiscal constraints, the actual appropriation for these programs might be considerably less.

The Commission recognizes the importance of NPPs in providing patient care and sees a role for the federal government in supporting their education. Decisions about the level of support for NPP training, however, could benefit from a systematic assessment of the future needs for these health professionals. These decisions should not be made in isolation, but should be made in concert with broader work force policies. In addition, support of training for each of the NPP groups should derive from the same sources of funds.

Policies to Improve Access for the Underserved

The Commission continues to be concerned about access for the underserved. It has reiterated its recommendations for bonus payments for NPPs' services in HPSAs in recognition of the importance of these services to Medicare beneficiaries in underserved areas. Ensuring access for the underserved under health system reform is likely to require additional policies beyond extending coverage. These measures should encompass the roles NPPs can play in serving these populations (see Chapter 9).

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CHAPTER 15

MEDICAL MALPRACTICE REFORM

The medical malpractice system does not adequately prevent medical injuries or compensate injured patients. There is also widespread concern that the current functioning of the malpractice system may promote the practice of defensive medicine and impede efforts to improve the appropriateness and cost effectiveness of care. The importance of malpractice reform is underscored by its inclusion in nearly all the major health system reform proposals being considered by the Congress.

This chapter incorporates the Commission's prior work on malpractice reform and extends its recommendations to address additional issues that have been raised in the various health system reform proposals now being debated. These include newly proposed tort reforms, the use of practice guidelines in malpractice litigation, and public disclosure of information about malpractice payments.

RECOMMENDATIONS

The Congress should effect the widespread adoption of certain tort reforms, including:

- **reasonable schedules for noneconomic damages (interim limits may be employed until a schedule is adopted), offset of awards for collateral source payments, periodic payment of large awards, and diversion of punitive damages awards to quality improvement activities;**

- **schedules for attorneys' contingency fees, thresholds for joint and several liability, and reduction to a reasonable period of long statutes of limitations for minors; and**

- **encouragement of the use of binding alternative dispute resolution methods (nonbinding alternative dispute resolution should not be required).**

Although initiatives to require certificates of merit, accord special legal status to practice guidelines, and raise the burden of proof for punitive damages have the potential to improve the functioning of the malpractice system, current knowledge of their effectiveness is not sufficient to justify that they be federally mandated.

Work should begin to develop a future malpractice system that would include a fast, efficient administrative system to compensate patients and a complementary system to detect and prevent medical injuries. To this end, the Congress should provide support for demonstrations and evaluations of binding alternative dispute resolution systems, enterprise liability, and alternative standards of compensability including no-fault. The federal government should support efforts to reduce injuries related to medical care.

Information in the National Practitioner Data Bank should not be disclosed to the public because of the likely adverse effects on the detection, compensation, and prevention of injuries and on disciplinary actions against physicians. Information on preventable injuries and malpractice payments should not be included in health plan performance reports for consumers unless better data and measures of comparability are available.

THE TASK FOR REFORM

The Commission described the goals and problems of the malpractice system in depth in its *Annual Report to Congress 1991* (PPRC 1991). Reducing the rate of medical injury is the most important goal of the malpractice system. Although medical care in the United States is generally of high quality, the incidence of preventable medical injury is more than acceptable. A second goal is to compensate fairly those patients who experience a medical injury. Few patients are being compensated today, and the awards are variable. Besides failing to meet these goals, the existing malpractice system may promote the practice of defensive medicine and impede efforts to improve the cost effectiveness of care. Further, the system's inefficiency results in high administrative costs and long delays in claims resolution. Correction of these deficiencies, then, is the challenge of reform efforts. Malpractice reform must be informed by an understanding of their underlying causes.

The ability of the current system to reduce the number of injuries is limited by its failure to collect and systematically analyze data with which to design and implement measures to prevent medical injuries. At present, most injuries do not result in claims, and databases are largely fragmented. Knowledge about the causes and prevention of medical injury is scarce. In addition, incentives for practitioners, institutions, and health care organizations to participate in formal injury reduction efforts are not as effective as they should be.

Compensation for negligent injuries is not consistent, timely, or proportionate to losses. Nor is it available to all who may qualify. The accuracy of determinations of liability is impaired by the difficulty of applying the negligence standard to individual cases. Awards for noneconomic damages, in particular, are highly subjective and variable.

The provision of cost-effective care may be deterred to the extent that the malpractice system requires (or is perceived as requiring) the delivery of more expensive care than would be

desired by those ultimately bearing its costs. The resulting costs may be hidden to the extent that the standard of care inherent in medical notions of good practice is too high. The legal standard of care results from ad hoc decisions of juries, the retrospective opinions of expert witnesses, and professional practices that may be influenced by other incentives to increase the delivery of services. Paradoxically, health care practices are driven by perceptions of possible legal liability. There is great concern that liability considerations may hinder efforts to reduce the delivery of inefficient or ineffective care. This concern is behind proposals to provide special legal protection for following practice guidelines.

Defensive medicine represents unnecessary or inefficient care delivered to reduce the risk of being sued or paying damages. Its extent and cost are unknown but may be substantial. Several factors may contribute to defensive medicine. The negligence standard does not provide a good prospective guide to decisionmaking. Physicians often disagree about the required standard of care in particular cases (Brennan et al. 1989). Furthermore, judgments of negligence after an injury are biased by knowledge of the adverse outcome, so what may seem to be appropriate care before the fact may later be deemed negligent (Caplan et al. 1991). In addition, physicians probably apply the standard differently than do juries. Judgments of liability that are inconsistent across similar cases, made by lay juries meeting one time, may contribute to defensive medicine. The medical profession's lack of agreement about what care is effective, as well as misperceptions of physicians about the legal standard of care, are also contributors.

The high administrative costs of the current malpractice system result from the formal processes for discovery of information, preparation for and conduct of the trial itself, and the use of expert witnesses. These reflect the need for extensive information and understanding that is associated with an inquiry into medical causation and individual fault. High procedural costs are barriers to filing claims for many potentially compensable injuries, particularly those that are less serious or that entail relatively minor economic losses.

TOWARD A MALPRACTICE SYSTEM OF THE FUTURE

The problems with the malpractice system are so pervasive that only a profoundly different system offers the potential for dramatic improvement. A proven model for such a system does not exist in the United States, but a possible future system is outlined here. The system would have two components. One would be a fast, efficient administrative compensation mechanism that would provide adequate awards to patients who experience preventable medical injuries. The other would be a complementary system for monitoring, quality review, and design and implementation of measures to reduce the rate of injury. Self-insurance or experience rating would provide strong incentives to prevent injuries. An important feature of the proposed system is that decisions about compensation and quality of care in individual cases would each be made by a process designed specifically for that purpose. Clear criteria for compensability and for damages awards would be established,

whereas judgments about quality of care would be made in forums better suited to make those determinations.

The administrative compensation system would provide access for as many valid claims as qualify, yet control the compensation levels to keep the system affordable. Enhanced access would be achieved by lowering economic and other barriers to filing claims, ensuring legal representation, and helping patients realize when they have experienced a potentially compensable injury. Injuries would also be detected by data-based surveillance and by encouraging or requiring the participation of providers in identifying and reporting potential injuries. Nonmeritorious claims would be screened out early, and the overall process would be expedited and efficient. It is possible that an even simpler, less formal process could be instituted for smaller claims. Compensation would be based on a more reliable standard than negligence, such as avoidability of the injury or no-fault.

The injury prevention and quality improvement system would receive information from the compensation system, its own surveillance mechanisms, and voluntary reporting. It would collect and analyze data on injuries, thereby facilitating the design and implementation of interventions. Health care organizations would be self-insured or malpractice insurance premiums would be experience-rated to provide strong incentives to prevent injuries. Ideally, this system would be part of a broader continuous quality improvement system operating throughout the health care system. The system would have an appropriate balance of public and professional input.

To realize this system will entail considerable developmental work; even then, it may not be feasible as described. Its components could, however, be developed in an evolutionary manner and implemented one at a time. To pave the way for this system of the future, the Commission's recommendations focus on:

- improving the functioning of the current system,
- developing and using efficient alternative dispute resolution systems for compensating injured patients,
- formulating and testing more reliable standards for compensation decisions, and
- collecting better data on medical injuries and improving systems to prevent injuries and improve quality of care.

The federal government should play a role in all four of these areas.

IMPROVING THE FUNCTIONING OF THE CURRENT SYSTEM

This section analyzes proposals to improve the performance of the current malpractice system, including various tort reforms, according special legal status to practice guidelines, and enterprise liability.

Tort Reforms

Tort reforms are changes in the legal rules governing malpractice lawsuits. They compose the bulk of the malpractice reforms commonly proposed. Widespread implementation of tort reforms would not in itself solve many of the underlying problems of the malpractice system, which persist even in states that have already adopted many tort reforms. Some tort reforms, however, could help the malpractice system operate somewhat more efficiently and consistently until more fundamental changes are made, and they can be instituted immediately. In the short run, these changes would be beneficial for the health care system as a whole. In addition, some tort reforms are prerequisites for the malpractice system of the future outlined in this chapter.

Tort reforms have been enacted inconsistently by the states. It is unlikely that they will be adopted uniformly, and some have been declared unconstitutional by state courts. For tort reforms to be implemented across-the-board, either federal preemption of state law is required, or states need strong federal incentives to adopt the reforms. A third alternative is to authorize individuals or groups to agree by contract with physicians or health care organizations to adopt whichever set of reforms is mutually acceptable (Havighurst 1989). This, however, would not ensure the widespread implementation of tort reforms. The Commission believes the case for certain tort reforms is sufficiently compelling that they should be federally mandated.

If tort reforms were enacted in isolation, however, their benefits would come at the expense of some injured patients. Some awards would be reduced, and access to legal representation for some potential claimants may be hindered if strict limits on damages and contingency fees were adopted. Ideally, tort reforms should be adopted as part of a broader reform package that includes expanded access to well-functioning alternative compensation mechanisms, better systems to prevent injuries and improve quality of care, or other measures that would benefit patients.

The Commission favors certain tort reforms in conjunction with other reforms that would benefit patients. The following discussion analyzes the merits of proposed tort reforms. If they are adopted, it would be important for the Agency for Health Care Policy and Research to fund studies of the effects of the reforms on patients' rate of claims, access to legal representation, and compensation for injuries.

Schedules for Noneconomic Damages. Much of the unpredictability and inconsistency that characterize today's malpractice awards is because of noneconomic damages (i.e., pain

and suffering), which account for about 50 percent of total payments (Metzloff 1991). Such damages are highly subjective. Reducing this unpredictability and eliminating the potential for unreasonably high awards would improve decisionmaking during the course of a lawsuit and promote settlement. Almost half the states have no statutory limits on noneconomic damages.

Awards for noneconomic damages should be rationalized by reasonable schedules of awards for noneconomic damages. The schedules would set acceptable ranges for awards for carefully defined categories of injuries. Schedules establish a different limit for each grade of injuries, which is preferable to a single absolute limit that may be too high for some injuries and too low for others. Until a schedule is developed, however, it may be necessary to adopt a single interim absolute limit on noneconomic damages.

Schedules for Attorneys' Contingency Fees. The typical contingency fee paid to the claimant's attorney out of an award is about one-third of the recovery. Contingency fees are limited so that they better approximate the fee to the work performed by the lawyer. About half the states have restricted contingency fees in some manner, including 11 that have enacted specific fee schedules or sliding scales based on the recovery amount. Fee reductions possibly may restrict access to legal representation for those with small claims or uncertain chances for recovery, although this problem could be minimized if the schedule permits greater percentages for smaller awards. In addition, it is desirable to discourage those claims that have little chance of success but are pursued simply because the potential attorney's fee is unreasonably large. The Commission recommends reasonable schedules for attorneys' fees so that more of a large award goes to the patient.

Modification of the Collateral Source Rule. The collateral source rule prohibits the consideration of other payments, such as those from health or disability insurance, received by a claimant for losses due to an injury. These sources of payment tend to operate more efficiently than the malpractice system, permitting more money to be devoted to compensation and less to administrative costs. Nearly half the states have not modified the collateral source rule and permit duplicate payments for a given loss. An offset of malpractice awards for collateral source payments is consistent with the compensation function of the malpractice system (although in theory it weakens general deterrence of injuries because the provider does not bear their full cost). Offsets of awards for collateral source payments are advisable under the present malpractice system. They would be vital to the affordability of the internal costs of a future, more-inclusive administrative system for compensating medical injuries.

Restrictions on Joint and Several Liability. In cases with more than one defendant, the doctrine of joint and several liability holds any defendant responsible for the full award if any other defendants cannot pay their shares apportioned by fault. This rule is designed to ensure adequate compensation for the injury, even though it penalizes defendants who have to pay more than what would be warranted by their share of fault. A total of 31 states have placed

restrictions on joint and several liability. Some have adopted a threshold of degree of fault below which joint and several liability does not apply; others have abolished joint and several liability entirely for noneconomic damages.

Practitioners and entities with adequate insurance or resources to pay malpractice awards do not want to pay the full amount of an award when their contribution to fault is minor or negligible. But it should be recognized that limits on their liability may come at the expense of adequately compensating injured patients. The Commission recommends that a balance be struck by adopting thresholds for the application of joint and several liability.

Periodic Payments of Large Awards. More than half the states require that larger awards be paid in installments over time. It is best if the payments are tailored to meet specific future needs. An annuity can be purchased to meet continuing needs resulting from permanent injuries. Annuities also permit tax-advantaged investment of an award. Overall, the Commission considers periodic payment beneficial.

Reductions in Statutes of Limitation. These laws limit the time period, after an injury is or should have been discovered, during which claimants may file a lawsuit. If the allotted period expires, a claim is barred even if it clearly has merit. Most states allow a longer period for minors, often until the age of majority. Long statutes of limitation create uncertainty, delay, and expense in insuring against malpractice claims. Birth-related injuries are the principal source of problems. Eight years is a safe period to allow detection of perinatal injury, and shorter periods are defensible.[1] States that have longer statutes of limitations for minors should be required to reduce them to eight years at most.

Punitive Damages. Punitive damages are rarely justified in medical malpractice cases. They are requested far more often than they are awarded (Metzloff 1991). Judges frequently reduce excessive or unjustified punitive damages awards. Overall, punitive damages do not appear to be an important problem in medical malpractice cases.

Two reforms have been advocated with respect to punitive damages. The first is that part or all of punitive damages awards be diverted to quality improvement activities. The rationale for this is that punitive damages, by definition, are not compensatory in nature. They are not "needed" by the plaintiff. Their purpose is to deter others from similar conduct, thus protecting future patients from injury. Consistent with this rationale would be to use the money from these awards directly for injury prevention or quality improvement activities. The Commission encourages the diversion of some or all of punitive damages awards for these purposes.[2] Plaintiffs would continue to allege punitive damages when warranted—

[1] Cerebral palsy can usually be diagnosed by three years of age; difficult cases can be diagnosed by the age of five (Stanley and Watson 1985).

[2] Juries should not be informed of this diversion so that their decisions on damages are not distorted.

despite the diversion—because their expected value would be included in settlement negotiations.

A second proposal for punitive damages is to raise the standard of proof required to receive them, from a preponderance of the evidence to clear and convincing evidence. The argument for this is that the greater penalties represented by punitive damages should be meted out only if proof is more certain than is required for ordinary negligence. This plausible rationale applies to punitive damages in all contexts, not just medical malpractice. Although changing the standard of proof seems reasonable, the Commission believes that the case for this more fundamental change in legal rules should be made on a broader basis than medical malpractice. Alternatively, convincing evidence should be put forward that there is a special need for this reform in the medical malpractice arena.

Certificate of Merit. A certificate of merit is a requirement that an independent medical expert review the medical record and certify that a claim is worthy before a formal lawsuit can be filed. Although this requirement appears reasonable, there are potential problems with it. It adds another step to the litigation process, consuming time and money. This may be a barrier to some meritorious claims that would otherwise be brought. Plaintiffs' lawyers tend to require the plaintiffs to pay for this initial expert evaluation, which is difficult for low-income plaintiffs who already sue less frequently than wealthier ones.

It is often difficult to judge at a case's inception whether it is likely to be successful, because key information is not available in the medical record and must be obtained through the legal process. If the certificate of merit requirement is too strict, some cases that eventually would be successful might be screened out simply because of incomplete information. The test should not be whether the claim is likely to succeed. Rather, the criterion should be some minimum threshold of the probability of success. It may be difficult to develop criteria that would not squelch meritorious claims, yet be strict enough to reduce significantly the number of nonmeritorious claims that proceed to litigation.

Completely frivolous lawsuits do not appear, anecdotally, to be a major problem for defendants, and the defense can fairly easily identify groundless claims. Although the idea has promise, more needs to be learned about the benefits and drawbacks of certificate of merit programs before they warrant being federally mandated.[3]

Practice Guidelines and Malpractice Litigation

With practice guidelines becoming more integrated into medical practice, more attention is being focused on their relationship to the malpractice system. There are two areas of interest.

[3] The certificate of merit requirement proposed in the Administration's health reform proposal would apply only after a claim has been litigated to a final conclusion in an alternative dispute resolution program. It is extremely unlikely that such a claim would be filed anew in the court system unless at least one expert was willing to testify for the plaintiff. The certificate of merit requirement in this context seems superfluous. Procedures to screen out frivolous claims are most useful at the outset of a claim, not after it has already been extensively litigated.

One is whether the system impedes the use of practice guidelines by health care providers to improve the appropriateness and cost effectiveness of care. Another is the effects that practice guidelines have on the process and outcomes of malpractice litigation. This section analyzes these topics and describes the results of a Commission-sponsored study of the use of practice guidelines in malpractice litigation.

The Relationship of Practice Guidelines and the Malpractice System. The treatment of practice guidelines in the malpractice system has important implications for their success in promoting the delivery of appropriate, cost-effective care. Practice guidelines could provide an important legal support for physicians and health care organizations that use them to provide less-costly but appropriate care. But revisions of practice guidelines by the judicial system could render practice guidelines ineffective in helping to control costs and improve quality. Such revisions could take two forms: an explicit rejection of the content of the guideline, or a carving-out of exceptions that effectively vitiates it. In response to this concern, states are providing or planning to provide special legal status to practice guidelines to facilitate their use by defense attorneys, and thus encourage their use by physicians (General Accounting Office 1993).

Practice guidelines may help to improve the functioning of the malpractice system (Garnick et al. 1991). This is because guidelines can make clear the applicable standard of care, which is a troublesome issue in many malpractice cases. They might also lessen the need for expert testimony on the standard of care, thus avoiding a battle of the experts. Guidelines may appropriately increase the amount of malpractice litigation by helping make clear to injured patients, their lawyers, or juries that a standard of care was breached. But several factors might prevent any improvement in the malpractice system resulting from the use of practice guidelines. The topics on which guidelines are being developed probably are irrelevant to the circumstances leading to most malpractice claims. Guidelines might be revised or reversed by the judicial system, either explicitly or by the creation of exceptions. In addition, increased litigation might result from questioning the validity of guidelines or the circumstances under which exceptions are warranted. Further, guidelines might be construed to create a firm standard of care when one is neither intended nor appropriate. Finally, the need for expert testimony might stay the same or even be increased.

The Harvard Study. Because little is known about the use of practice guidelines in malpractice litigation, the Commission engaged Harvard University researchers to conduct a study to provide empirical information on this topic (Hyams et al. 1994). The study had three components. The first was a review of published judicial decisions that concern practice guidelines. The second was a review of malpractice claims files to determine how often guidelines were used in actual malpractice cases, and to discover the ways they were used. The last was a survey mailed to a sample of plaintiffs' and defendants' lawyers.

A computerized search of all published judicial decisions located 32 cases in which practice guidelines were used: 23 by the plaintiff (claimant) and 9 by the defendant. Plaintiffs won 17

of the 23 cases in which their lawyers used the practice guideline, while in 6 of 9 cases a practice guideline was used successfully by the defense. Five additional cases concerned the narrower question of whether national practice guidelines could provide evidence of local standards of practice. The majority of the cases involved practice guidelines promulgated by the American College of Obstetricians and Gynecologists.

The claims files of two malpractice insurance companies were randomly sampled (with oversampling of anesthesia and obstetric claims) and 259 claims were reviewed. Only 17 (7 percent) involved the use of practice guidelines, 11 of which were obstetric cases. In 12 of the cases the practice guidelines were introduced by the plaintiff's lawyer, and in 4 they were used by the defense (one case was indeterminate). Although the power of the analysis was limited by the small numbers, the use of guidelines was not significantly associated with various characteristics of the physician, lawyer, hospital, or injury, except that physicians who had a longer relationship with the patient were significantly more likely to have claims that involved practice guidelines than were others. There seemed to be greater use of guidelines in cases involving nonteaching and smaller hospitals, as well as those filed by Medicaid patients.

Surveys were mailed to a random sample of 960 plaintiff and defense medical malpractice attorneys in the United States; 578 (60 percent) responded. Three-quarters were aware of practice guidelines. Half the respondents had at least one case each year in which guidelines played a role, and a high proportion reported that the use of guidelines was increasing. The majority of the cases involved care that departed from the guideline. While most of the attorneys reported that the need for experts in the practice guideline cases had not changed, 5 percent of attorneys said it had decreased, and 12 percent said it had increased. Of the attorneys representing plaintiffs, one-quarter stated that a guideline had influenced their decision not to take a case in the past year; one-quarter of all the attorneys noted that a guideline had influenced their decision to drop or settle a case. Finally, one-quarter also said that a guideline had influenced the decision of a trier of fact (jury or judge) in at least one case during the preceding year.

Several conclusions can be drawn from this study. Practice guidelines are playing a modest but increasing role in malpractice litigation. Obstetric guidelines are most frequently being used, probably because they are among the oldest and best known to physicians and lawyers. Guidelines are being introduced more often by plaintiff than by defense attorneys, possibly because guidelines may provide cheaper or stronger evidence of the standard of care than expert testimony. The use of guidelines by either side is usually, but not always, successful in malpractice litigation.

Although the effects of guidelines on the litigation process are varied, overall they seem positive. Guidelines helped judges and juries reach decisions, but there was not much change in the need for expert testimony. Even though the overall effect of guidelines on the amount of litigation cannot be assessed, they may well have led to better decisions to take, settle, or

drop cases. Future monitoring and research are needed to assess whether guidelines are being used appropriately in court, including whether disputes about their applicability or content are troublesome. The results should inform how guidelines are derived and drafted. Some states have given guidelines special legal status in malpractice cases. Their experience should be assessed, paying particular attention to whether these actions have promoted or impeded the appropriate use of guidelines in litigation and in patient care.

Enterprise Liability

Enterprise liability refers to the situation when a health care organization assumes financial responsibility for all negligent injuries to patients under its care, thereby relieving individual practitioners of all personal tort liability for such injuries (Weiler 1991). This is thought to offer two benefits. First, enterprise liability results in clear savings in administrative costs. Instead of multiple defendants—each often requiring separate lawyers and investigations—there is only one defendant: the enterprise. Additional savings also result from eliminating the many separate individual and corporate malpractice insurance policies that must otherwise be maintained.

Second, enterprise liability is thought likely to result in fewer medical injuries. It places the burden of injury detection and prevention on an entire entity or system that delivers care, one that can more effectively use resources—and devote more resources—to accomplish these tasks than individual physicians acting separately. Others argue, however, that enterprise liability deprives individual physicians of the deterrence incentive stemming from their need to purchase their own malpractice insurance. The debate is theoretical because of the absence of empirical evidence relevant to the issue.

The formation of accountable health plans under system reform would undoubtedly accelerate the trend toward integrated delivery systems and other entities that increasingly look like unified enterprises. Enterprise liability already exists for hospitals owned and staffed by one organization, such as a health maintenance organization (HMO), or a typical university or county hospital, and for those that provide, or channel, malpractice insurance to their affiliated staff. As vertical integration spreads through the delivery system, enterprise liability is likely to follow for reasons of efficiency. Enterprise liability is also the end result of the trend in legal doctrine toward holding hospitals and other health care organizations responsible for negligent injuries to patients (Weiler 1991).

Enterprise liability is probably an inevitable result of legal trends and the incentives sharpened by increased competition in the medical marketplace. The policy question is whether its spread should be encouraged or required sooner than would occur otherwise. There are some practical difficulties with imposing enterprise liability. It requires an enterprise that is tied financially and professionally to the care for which it is responsible. If a hospital and its medical staff were considered an enterprise, for example, this relationship would be present for inpatient but not outpatient care. Third-party payers are financially but

not professionally linked with physicians, at least at this time. It would also be difficult to calibrate malpractice insurance premiums and fees for physicians who do not practice exclusively within an enterprise.

Several steps could be taken short of imposing enterprise liability. Policymaking would be improved if there were empirical evidence that enterprise liability reduced costs and enhanced quality of care. Federal support is thus warranted for demonstration projects and evaluations of existing examples of enterprise liability.

Another possible step would be to require accountable health plans to report information on aggregate malpractice payments made to their patients for consumers to use in comparing plans. This approach would not involve plans in defending physicians or paying damage awards on their behalf, but it would give plans an incentive to select doctors more carefully, monitor the malpractice claims experience of their physicians, and help them avoid claims. Physicians would have a greater incentive to ensure that their professional colleagues work to prevent negligent injuries. It would be useful to supplement malpractice claims information with a requirement that health plans actively monitor for preventable injuries to their patients as part of their quality assurance activities. For reasons discussed later in this chapter, improvements in data and measures of comparability are needed before this should occur.

Finally, enterprise liability could be encouraged by the way in which quality assurance activities are structured within health plans. Health plans could be required to conduct such activities in a manner analogous to that of hospitals, through the equivalent of medical staff quality assurance committees. Each plan would be responsible for ensuring the successful operation of its committees, but the physicians—the health plan's medical staff—would perform the peer review and quality improvement activities. A group of plans could delegate this function to a single local entity, so that each plan would not need its own quality assurance committee. Quality assurance structures that link physicians and engage them in quality review could pave the way for better quality improvement activities and an easier transition to enterprise liability.

COMPONENTS OF A FUTURE MALPRACTICE SYSTEM

These recommendations would help improve some of the deficiencies of the malpractice system. They would not, however, address two underlying causes of the problems with the malpractice system: reliance on the court system, and use of the negligence standard to determine both the standard of medical care and eligibility for compensation. The future malpractice system envisioned by the Commission would utilize an efficient administrative system to resolve claims on the basis of a standard for compensation that is more reliable than the current negligence standard. Such a system would be helpful for monitoring quality of care and implementing programs to prevent medical injuries.

Alternative Dispute Resolution Systems

Significant improvement in processing malpractice claims can occur only outside the courtroom. Administrative systems and other alternative dispute resolution (ADR) methods offer the potential for resolving malpractice claims more quickly, efficiently, and consistently (Johnson et al. 1989). A variety of ADR mechanisms have been developed, such as arbitration and mediation. Administrative systems not only may give potential claimants easier access to compensation, but also use alternative standards for compensation (discussed in the following section). The future compensation system anticipated by the Commission would rely on an administrative system to process claims. Most malpractice reform proposals encourage or require using alternative dispute resolution.

Several possible features of ADR mechanisms may improve the resolution of malpractice suits. If decisions were made by someone with experience (as could be the case with ADR), they might be of better quality, have more precedent-setting value, and be more consistent. By contrast, a jury meets only once; it has no firsthand experience to draw upon in deciding cases and no access to written decisions for other similar cases. A jury does not have to justify its decision, nor is it accountable for its performance. If decisions were written and accessible, they would likely be more consistent and predictable. Inconsistencies among cases could be resolved by an appeals process, and the relevant standard of practice would then be known prospectively by health care providers. An administrative decisionmaker may be more likely to understand and honor the recommendations of good practice guidelines and to condone cost-effective care.

Little is known about the efficacy of ADR in medical malpractice, although the experience of Kaiser Permanente is helpful. Several of its health plans use mandatory binding arbitration to resolve all malpractice claims. Their experience reportedly has been favorable, in that litigation costs are somewhat less because the hearings are much shorter than those in jury trials. In addition, compared with public trials, private arbitration hearings are less burdensome for Kaiser physicians. Cases appear to be resolved faster than comparable cases litigated in the courts (Felsenthal 1994). Kaiser has discontinued arbitration in at least one region, however, because the quality of the available arbitrators was considered insufficient.

Despite its potential, alternative dispute resolution has a number of possible drawbacks. If the result reached through ADR is not binding, the method would merely impose significant additional delays and costs on an already slow and expensive litigation process. In addition, the constitutional right to a jury trial is a potential barrier to requiring the use of binding ADR. And finally, whether shifting attorneys' fees to the party who loses an appeal in the courts truly discourages resort to the courts is unknown. On the one hand, lower-income claimants might be relatively disadvantaged because attorneys would require them to assume the risk of paying their opponent's legal fees. On the other, the fee-shifting provision might be waived for them, and thus not have its desired effect of discouraging relitigation in the courts. An ideal scenario would be the development of ADR systems advantageous to

plaintiffs and defendants alike, so that both would voluntarily agree to using them and being bound by the result.

One of the judicial system's most important features is its perceived impartiality and the degree of control accorded the parties over the litigation process. This is especially important to injured claimants, who may feel less powerful than the provider or system they are suing. In administrative or ADR systems, the decreased amount of formal procedural protection makes the need for objectivity even more important. Although using experienced personnel can be advantageous, it can be difficult for them to remain unbiased when dealing with a few large repeat players such as malpractice insurers and health plans.

Further, each type of ADR method is more useful in some situations than in others. There is little experience in tailoring the use of ADR to the needs of particular cases. The quality of any ADR process depends heavily on the personnel involved. It is unlikely that enough high-quality ADR services would be available immediately if all medical malpractice cases had to use this technique. Finally, ADR systems may evoke counterproductive behavioral responses, which are difficult to predict in advance. For example, if final adjudicatory hearings are cheaper, easier, and faster than jury trials, more cases might proceed to such hearings, lengthening rather than shortening delays in compensation.

In view of these uncertainties, it may be premature to require that all malpractice claims be resolved through ADR. Demonstrations and evaluations should be supported by the federal government to learn more about how these systems can best operate. Workable methods need to be devised to permit easier access for potential claims while rejecting nonmeritorious claims early. Incentives for settlement should be used. Among the issues that require study are the length of time needed to resolve cases, the system's efficiency and ability to improve access for claims, and the objectivity and quality of the judgments.

Alternative Standards for Compensation

The negligence standard does not appear to be a good guide to decisionmaking by providers and juries. Possibly, more reliable standards for liability could be developed, such as ones based on no-fault or avoidability of the injury. Such standards must be tested for their reliability and their effects on the number and size of claims paid.

No-Fault. A no-fault standard would compensate patients whose injuries were caused by medical care, regardless of whether the care was substandard or not. The determination of eligibility for compensation would be simplified by dispensing with the need to determine the standard of care and whether it was breached. Evidence from one study suggests that judgments of causation can be made more reliably than judgments of negligence, although some difficulties would remain because the adverse effects of treatment must be distinguished from the underlying illness (Brennan et al. 1989). Definitional problems may occur if the

universe of compensable injuries is further limited, such as excluding unavoidable failure of treatment from compensation.

The principal fear raised by a no-fault system is that vastly larger number of injuries might become eligible for compensation. Awards would have to be restricted to keep the system affordable. In estimating the cost of a hypothetical no-fault system in New York, for example, the Harvard Medical Practice Study investigators restricted compensation to net economic losses experienced more than six months after the injury, with no noneconomic damages permitted (Harvard Medical Practice Study 1990). In addition, the experience overseas is that, with a no-fault system, the number of claims increases steadily (Hellner 1985). A no-fault standard should be tested first in a demonstration in the United States. When comparing results across systems of care, demonstrations should employ methods to adjust rates of injuries and levels of compensation for differences in the health systems' patients—especially age—that influence the likelihood and severity of injuries.

Avoidability. Some errors in care are not negligent. For example, a mistake in considered professional judgment is often deemed not to be negligent. Whereas in hindsight an injury might have been avoided, having missed the opportunity to prevent it is not necessarily negligent. It may be easier to determine whether an injury was avoidable—by some measure of probability—than whether failure to avoid it was due to negligence.

A standard based on avoidability is appealing because it compensates patients for injuries that need not have occurred. It also would focus prevention efforts on the full range of preventable injuries. Fewer claims would be compensated than under no-fault, which would help keep the system affordable. For example, a particular treatment may entail a known but unavoidable risk of a serious injury or complication. Patients who experience an adverse outcome from the treatment would be compensated under a no-fault system, but not under a standard based on avoidability. More claims would qualify for compensation, however, under an avoidability standard than under a negligence standard.

An avoidability standard would offer other advantages as well. It shares with no-fault the advantage of not conditioning compensation on a judgment about whether the care was substandard.[4] Compensation for an injury would not itself mean that the care was negligent; that determination would need to be made through another mechanism. That compensation would not depend on judgments about quality of care could reduce inappropriate defensive medicine practices and improve providers' confidence in the system. At the present time, there is no information on the reliability of such a standard, but it may be more reliable than the negligence standard.

[4] The accelerated-compensation event proposal attempts to spell out an avoidability standard for certain injuries (Tancredi and Bovbjerg 1991; Bovbjerg et al. 1991). These comprise a list of avoidable adverse outcomes of care that are designated in advance to be compensable. The current malpractice system would continue to govern compensation for all other injuries. An accelerated-compensation event system that applies only to a subset of injuries, however, may generate disputes about which system covers the injury.

BETTER PREVENTION OF MEDICAL INJURIES

The prevention of medical injuries is a difficult task that requires considerable resources and a systematic approach. The general deterrence incentive provided by the threat of legal liability is not sufficient to reduce preventable injuries to a minimum. In part, this is because the general incentive for physicians not to be negligent must be translated by individual physicians into the particular ways in which they try to avoid injury. Isolated lapses in vigilance inevitably happen, and it is difficult for individual physicians to learn from the relatively few occurrences about which they may be aware. In any case, since the general deterrence incentive is already in effect, specific measures designed to prevent injuries are needed to reduce their rate of occurrence further.

A systematic approach to injury prevention is likely to be more effective than relying purely on general deterrence. Risk management activities within hospitals, for example, have been shown to be associated with fewer malpractice claims (Morlock and Malitz 1991). Effective injury reduction programs require the collection and analysis of data, as well as the design and implementation of effective interventions.

Data Collection

Better data are needed to help detect preventable injuries and determine their causes. Data usable for injury reduction have come principally from closed claims files of malpractice insurers. Only a small percentage of avoidable injuries is included in such files; often, the information about each claim is limited (Harvard Medical Practice Study 1990). There is also a substantial time lag for claims files to accumulate information, since they depend on the legal process. The National Practitioner Data Bank (NPDB) in theory contains a complete listing of malpractice claim payments, but the information on each claim is not coded in a way that is useful for prevention activities.

Early warning systems and active surveillance are needed to detect as many preventable injuries as possible, not just those that result in claims. The basic epidemiology of medical injuries needs to be delineated. Methods to describe the etiology and nature of injuries are in their infancy. Coding systems need to be developed to permit this more abstract information to be entered into computerized databases. Because many events need to be collected and analyzed to detect patterns of rare events, local databases must be compatible to permit merging. Health system reform may provide an opportunity for developing standardized coding and databases (see Chapter 16).

Despite its importance, however, data-based surveillance—no matter how well designed—is not sufficient. The best information source concerning care-related problems is the caregivers themselves. Early warning and reporting systems for medical injury have been effective in identifying, soon after their occurrence, many of the injuries that result in claims (Lindgren et

al. 1991).[5] It is likely that many of the preventable injuries reported by physicians are not discoverable in the medical record simply by using standard screening techniques. Confidential voluntary reporting of potentially preventable injuries to a hospital or other responsible organization has promise (Petersen et al. 1992). Voluntary reporting of injuries, as well as participation in peer review and injury prevention activities using those data, needs to be protected and encouraged by state and federal law.

Design and Implementation of Interventions

When preventable medical injuries are detected and their causes understood, ways must be devised to prevent such occurrences. These interventions can be either cognitive or procedural. The education of providers is important; cognitive interventions make sense intuitively to address cognitive mistakes. Errors that cause injury, however, are often due to isolated lapses that are difficult for individual health care workers to eliminate. In addition, some injuries are caused by problems in health care delivery systems and procedures rather than by an individual caregiver's mistake.

Systems or process interventions are likely to be even more effective at preventing injuries than education alone. Administrative policies and medical practice guidelines can be designed to minimize the risk of avoidable injury, and checks can be instituted to make sure that policies are followed. Guidelines for intraoperative monitoring of blood oxygen saturation, for instance, have reduced the number of hypoxic injuries during anesthesia (Keenan and Boyan 1991).

Integration with Quality Improvement. These activities are best performed in conjunction with the quality assurance and improvement programs of health care organizations. Structures to conduct these functions do not exist for fee-for-service plans. Hospitals are natural locations for surveillance and early warning for inpatient care problems, but outpatient care may be more difficult to monitor. The standardized data reporting that may be required under health system reform, however, could facilitate the detection of preventable injuries stemming from outpatient care (see Chapter 16).

After possible preventable injuries are identified, individual cases must then be reviewed. Some thought is needed on how peer review can be better conducted, especially for outpatient care. As described above, one way in which health plans could conduct better quality assurance and improvement activities might be for the professional staff of a health plan to be responsible for peer review within that plan in the same manner in which the medical staff of a hospital is responsible for quality assurance related to physicians. The health plan would ensure that quality assurance committees and structures exist and are functioning properly,

[5] There are additional benefits to early identification of patients injured by medical care. Any needed remedial or rehabilitative treatment can be provided sooner. Claims can be resolved earlier. A better, contemporaneous evidentiary record can be created and preserved, which can help improve the accuracy with which liability determinations are made.

but the actual peer review and quality improvement activities would be the responsibility of the physicians participating in the plan. Monitoring and early warning systems would identify problems for review by the quality assurance committees. It may not be necessary for each health plan to maintain an independent committee for local peer review of physicians not tied to a single plan; it may be easier to use a single review organization for multiple payers that is structured on local group practices, hospitals, or geographic areas (see Chapter 10).

The Role of the Federal Government. The federal government should ensure that practitioners, hospitals, and health care organizations engage in effective efforts to reduce injuries due to inpatient and outpatient medical care, including those caused by negligence. These activities should be a required part of quality assurance and improvement programs of practitioners and health care organizations, and should include both inpatient and outpatient care. The federal government should support research on the etiology, classification, and prevention of medical injury. Support should be given to the development of the necessary databases and to efforts to reduce the incidence of medical injury.

Disclosing Information About Malpractice to the Public. One strategy that has been suggested to protect patients from negligent injuries is to provide them with information about the malpractice experience of physicians and health plans. Consumers could be given access to the physician-specific information about malpractice payments contained in the NPDB, to which all malpractice payments made on behalf of physicians must be reported. The NPDB information is now available only on a confidential basis to hospitals and other qualified health care institutions for physicians who have staff privileges or are applying for them. Some managed-competition proposals envision consumers using a quality report for health plans that could include information about the plan's aggregate malpractice experience (see Chapter 10). These possibilities raise difficult issues. Among these are the public's right to information and choice, and the ability of consumers to understand and use primary information relating to quality of care. Others relate to the effects of public disclosure on the processes that generate the information, and whether internal programs or external public pressure is more effective in improving quality (to the extent that the two strategies are incompatible).

Some believe that consumers have a right to the information in the National Practitioner Data Bank to help choose a physician. They argue that fears that the public will not understand or will misuse the information are paternalistic and unfounded. Perhaps implicit in this position is the belief that the oversight mechanisms of the profession and of state licensing boards have not been successful in protecting the public from substandard practitioners.

Other considerations, however, weigh more strongly against permitting public access to the information in the National Practitioner Data Bank. This information essentially comprises profiles of the malpractice experience of each physician. It is subject to the potential problems with profiling information that the Commission has previously discussed, including the accuracy and relevance of the data (PPRC 1992).

The information in the NPDB is probably highly accurate in terms of payments to claimants (although some degree of underreporting undoubtedly occurs), but the brief description of each negligent event often does not permit a full understanding of the circumstances of the injury. Issues of causation and negligence are often quite difficult and complex in individual cases, and it can be problematic to allocate individual responsibility for a medical injuries. The relevance of the data is questionable. Paid malpractice claims are only modestly predictive of future claims. This is enough to experience-rate groups of physicians but not sufficient to predict the future experience of any one physician (Rolph 1991).[6] A paid malpractice claim does not necessarily represent poor quality of care, and even poor care in any particular instance does not imply incompetence with respect to that condition or procedure. Finally, it would be difficult for consumers to use the data to avoid receiving negligent medical care, because errors or poor competence in one aspect of care are probably not predictive of problems in others (Sanazaro and Worth 1985).

Permitting public access to the NPDB would likely adversely affect the underlying processes that generate the information. There are anecdotal reports that more physicians are refusing to settle cases in order to avoid being reported to the now-confidential NPDB. The allocation of fault among individual physicians involved in a case is problematic and difficult to convey in NPDB reports. The need to assign individual fault and report physicians to the NPDB can cause unnecessary conflicts within enterprises. These effects would be greatly exacerbated if the NPDB were opened to the public. The incidence of defensive medicine, particularly the avoidance of risks by refusal to provide high-risk services, would likely be increased.

These problems would be lessened if aggregate malpractice claims experience, rather than physician-specific information, were reported yearly for health plans. Perhaps this information could be included on the quality performance reports that are part of managed-competition proposals to aid consumers when choosing among plans (see Chapter 10). Individual physicians' behavior would be less likely to be affected, but health plans might become less aggressive in searching for preventable injuries and more interested in prolonging litigation when possible. Before such aggregate malpractice data could be reported, however, appropriate measures must be developed to ensure comparability of the profiles among plans, including the mix of services they provide and the propensities of their enrolled populations to file and resolve claims. With some experience and research, however, meaningful indicators might be developed that would not cause adverse behavioral reactions by plans or practitioners. For example, one possible measure of a plan's performance in detecting negligent injuries might be the number or proportion of injuries that resulted in successful malpractice claims but were not first detected by the plan itself. Most health plans

[6] The Administration's health reform proposal would limit disclosure to physicians with multiple claims that exceed a threshold to be set by the Secretary of Health and Human Services. Although this would better target physicians more likely to have future malpractice claims, the malpractice risk exposure of the physician must be taken into account. The threshold for disclosure should vary depending on the number of years of practice, whether the physician works full time, the physician's specialty, and the relative risk within that specialty of the services provided by the physician.

do not now have access to information on malpractice claims against physicians or hospitals, so data sources would need to be developed and refined.

Ultimately, decisions concerning public disclosure of information on malpractice claims depend on judgments about whether quality of care in general—and the rate of negligent medical injuries in particular—would be improved and at what cost. At present, the Commission believes that the problems related to public disclosure outweigh the benefits.

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CHAPTER 16

DEVELOPING A NATIONAL DATA STRATEGY: AN UPDATE

A key element in health system reform, however designed, is the development of a national data strategy. Over the past two years the Commission has reported to the Congress on its ideas for that strategy. Two years ago, it described the principal objectives of an integrated data system. Last year it made several recommendations on how a system might be designed to meet those objectives. This year's chapter summarizes the Commission's past work and provides an update on recent data activities. It also responds to broadly held concerns about the need for administrative simplification with a new recommendation on data clearinghouses.

RECOMMENDATION

The federal government should support demonstration projects of regional data clearinghouses that collect all claims and utilization data directly from providers, health plans, and consumers and make necessary information available to payers, plans, government, and other interested organizations as appropriate. The projects would evaluate the feasibility of clearinghouses carrying out these functions and their ability to simplify claims submission and payment.

After a brief discussion of the requirements that health system reform would impose on national data systems, the chapter reviews the Commission's previous recommendations for a national data strategy. This review includes an update on a variety of public and private activities aimed at accomplishing some of the goals shared by the Commission. It then reviews how the political environment has evolved by summarizing very briefly how several major reform proposals treat data issues. It also addresses ways in which Commission recommendations might serve the needs of different reform scenarios. The chapter concludes with a discussion of the use of data clearinghouses as a means to address administrative simplification.

REQUIREMENTS FOR A NATIONAL DATA STRATEGY

Last year, the annual report presented a data strategy to respond to five principal requirements imposed by health system reform:

- monitoring utilization and costs,

- monitoring quality of care,
- establishing accountability for quality and access,
- supporting outcomes research and profiling, and
- measuring risk.

Although the political debate has moved forward along many dimensions, all these requirements remain important. Other chapters in this report discuss the substance of these issues; it remains important that any national data strategy address these requirements. One additional requirement for a national data strategy should be highlighted as well. Data systems, if properly designed, can play an important role in reducing administrative complexity and expenses. A potential role for data clearinghouses (discussed below), as well as greater standardization of data elements, forms, and procedures, could reduce substantially the complexity currently faced by both providers and consumers.

RECOMMENDATIONS FROM THE 1993 ANNUAL REPORT

In its 1993 annual report, the Commission made specific recommendations for a national data strategy that would support health system reform but would be equally important for improving the current system. Although the chapter stated the Commission's interest in the development of regional clearinghouses that would take over data collection from the health plans and other payers that run their own systems today, it saw such steps as untested and not feasible in the short term. As a result, the Commission supported a strategy where plans would continue to collect claims or administrative data, rather than moving basic data collection to a regional system run either by government or private community-level organizations.

To address the broader data needs of the federal government, local communities, and others, the Commission envisioned a system of regional data organizations that would obtain data from plans and payers to be made available for various uses. These regional data organizations or carriers differ from regional clearinghouses in that they would not collect data directly from providers and consumers but would assemble data selectively from plans and payers that in turn get the raw data from providers and consumers.

The Commission also recommended that the Congress authorize a new or existing federal data agency to be responsible for implementing the new system, including the establishment of basic data standards and principles of confidentiality and privacy. Under the Commission's strategy, the federal data agency would consider whether standardized data summaries or data samples could be used in lieu of complete claims data. The agency would also consider an expanded role for state hospital discharge abstract data sets and for expanded clinical data collection in ambulatory settings.

Separate Commission recommendations called for the development of improved quality performance measures and improved measures that could serve as risk adjusters.

1993 RECOMMENDATIONS

The Congress should enact legislation to create a national data system. Such a data system would draw on the Medicare model by using regional boards or carriers to collect data from individual plans and third-party payers. These boards or carriers would verify the accuracy and comparability of the data and aggregate summary information to be used by the local community and the federal government for various monitoring, quality improvement, and regulatory functions. A federal agency or board would establish basic data standards and oversee implementation of the system.

The federal government should support development of improved quality measures, including those based on outcomes of care and enrollee satisfaction. In the short term, priority should be given to identifying proxies that can be used as quality measures.

The federal government should support development of improved risk measurement, especially those measures that can be based on readily available proxies.

Although these recommendations addressed an overall strategy for meeting national data needs, they did not attempt to prescribe what should be included in a standard claim form, how unique identifiers should be created, or how confidentiality protections should be written into law. The Commission supplemented its recommendations with a series of specific steps that could be addressed in legislation (e.g., establishing data and confidentiality standards) or made the responsibility of the federal data agency (e.g., testing the compatibility of managed-care databases or identifying existing data resources such as hospital discharge abstracts) in order to move toward creation of a national database.

A certain level of understanding of how data systems should operate may help policymakers assess whether and how they would meet the various needs imposed by different reform proposals. The Commission's discussion of these issues in previous reports has been aimed in part at establishing that basic level of knowledge. At this point, for example, it seems clear that private-sector and government organizations are moving forward toward acceptable data standards. The process of developing confidentiality standards has moved more slowly, although a number of groups have put forth models for legislation.

In the areas of expenditure limits, quality monitoring, and risk adjustment, the Commission has addressed the limitations of current data systems both in previous reports and in several

chapters of this report. While the Commission strongly reiterates its statements in support of developing and refining databases that support these needs, it seems premature to set forth more detailed blueprints for data strategies prior to congressional decisions on the shape that health system reform may take. In fact, it is probably unnecessary to write all the details into legislation—leaving them instead to the implementation stage.

Standardization Relating to Data Elements, Forms and Unique Identifiers

The Commission addressed standardization issues in both the 1992 and 1993 annual reports and reiterates here both the importance of standardization and the use of some of Medicare's definitions and forms as a starting point. Its position reflects a view that the federal government should set the standards, but that these standards will be better accepted if they follow the lead of other ongoing efforts in this direction. Some recent progress toward standardization deserves notice, including reports in the past year by the Workgroup for Electronic Data Interchange (WEDI), the Institute of Medicine (IOM), and the National Committee for Quality Assurance (NCQA).

The Workgroup for Electronic Data Interchange was created in 1991 in response to a forum convened by the Secretary of Health and Human Services. It is a voluntary public-private task force that is attempting to standardize health data and especially the electronic communication of these data across the industry. Last year, the Commission described the early work and recommendations by WEDI (PPRC 1993a). In October 1993, WEDI released a second report that reported on developments during the intervening year and featured a series of new recommendations. Among its more significant recommendations were the following:

- mandate by federal law that all health care participants use standards promulgated by the Accredited Standards Committee X12 Insurance Subcommittee of the American National Standards Institute or by the Department of Health and Human Services,

- require large users to adopt standards by the end of 1994 and all users by the end of 1996,

- use the social security number as a unique patient identifier (with strengthened security protections), and

- use the social security number or tax identification number as a unique provider identifier—or alternatively use the Health Care Financing Administration's unique provider identification number.

WEDI has also revised its estimate of the net administrative savings that might result from its recommended actions. In 1992, it estimated cumulative gross administrative savings to plans

and employers of from $4 billion to $10 billion. It has doubled that estimate by adding savings that would accrue to providers and has estimated implementation costs. WEDI now believes the cumulative net savings over the next six years would total about $42 billion (WEDI 1993).

The Institute of Medicine's Committee on Regional Health Data Networks released a report in January 1994 on potential roles for regional health database organizations. Much of the report focused on privacy concerns, to be noted below. It also addressed the issue of unique person identifiers and argued for creation of a new unique identifier on the grounds that the social security number offers too many opportunities to breach confidentiality (IOM 1994).

The NCQA (together with a coalition of health plans and large employers) in May 1993 published in draft form a revised version (version 2.0) of the Health Plan Employer Data and Information Set (HEDIS). An earlier version of this data set was described in the Commission's previous annual report (PPRC 1993a). HEDIS was developed to serve two different purposes: first, to define a core set of performance measures and standardize the process used by health plans to submit these measures, and second, to set forth these performance measures as benchmarks for documenting plan performance.[1] As noted by the Commission last year, managed-care plans often lack the transaction data traditionally needed to generate key quality and utilization indicators. HEDIS 2.0 offers different methodologies for the derivation of performance measures from administrative data or medical record audits. Although critics point to numerous weaknesses in the HEDIS approach, it represents an evolving effort to bring a degree of compatibility between the databases traditionally used in managed care and those more common to traditional insurers (NCQA 1993).

The Commission reiterates its belief that standardization is essential and that the federal government needs to set the standards that will be followed throughout the system. Clearly, various groups are moving toward consensus on many of these issues. A significant exception, however, is whether the social security number is suitable as a unique patient identifier.

Standards for Confidentiality and Privacy

The Commission believes that protection of privacy and confidentiality is critical to the development and implementation of a national data strategy. This section calls attention to several recent efforts to develop confidentiality standards or model laws.

The Office of Technology Assessment (OTA) released a report, *Protecting Privacy in Computerized Medical Information*, in September 1993. Among its conclusions were that, "While some federal laws address the question of privacy in certain information collected and maintained by the federal government, no federal statute defines an individual's specific right

[1] The latter use of HEDIS is addressed more fully in Chapter 10 of this report.

to privacy in his or her personal health care information held in the private sector and by state or local government." It also concluded that the current patchwork of state and federal law is "inadequate to guide the health care industry with respect to obligations to protect the privacy of medical information in a computerized environment." OTA called for new federal legislation and also discussed options for monitoring private-sector standard setting and establishing a special commission to oversee the protection of health care data (OTA 1993).

As noted above, the IOM Committee on Regional Health Data Networks made a recommendation that the Congress enact preemptive legislation to "establish a uniform requirement for the assurance of confidentiality and protection of privacy rights for person-identifiable health data and specify a Code of Fair Health Information Practices that ensures a proper balance among required disclosures, use of data, and patient privacy." States would be permitted to implement more stringent standards. The committee's recommendations also limit the circumstances under which person-specific information could be released (IOM 1994).

WEDI also included among its recommendations a call for congressional adoption of preemptive legislation. It drafted a model bill that would achieve that end for electronic information (WEDI 1993). In addition, model legislation developed by the American Health Information Management Association has received considerable attention. A few states also have enacted fairly comprehensive statutes, some following the model act established by the National Association of Insurance Commissioners.

There appears to be considerable common ground in the various proposals for protecting privacy and confidentiality. The Congress should move forward quickly with adopting legislative protections even in the absence of health system reform.

Regional Data Organizations

The Commission's 1993 recommendation most directly addressed the need for a national data strategy based on regional data organizations, and the Commission reiterates that position here. This strategy was designed to meet the immediate needs of health system reform—for enforcing expenditure limits, monitoring quality and access, and fulfilling other needs—without either a total restructuring of the way data are collected and processed or the creation of an unmanageable national data bureaucracy.

Some details on how regional data organizations could collect the utilization and cost data needed for a system that enforced expenditure limits primarily through rate setting were described in previous Commission reports and are elaborated below. Regional data organizations would also be responsible for developing the data necessary to measure risk and to monitor access and quality—including the measures needed to support quality monitoring and performance reports (see Chapters 8 and 10). For all these functions, it would be critical to incorporate a data auditing system to ensure that data are accurate and comparable.

One issue discussed only briefly in last year's report was whether regional data organizations are envisioned as public or private entities and whether existing organizations could fulfill these functions. In some areas, regional health data organizations that acquire and maintain data from a variety of sources already exist. The IOM committee referred to above recommended several ways—including steps to ensure the accuracy, validity, and confidentiality of the data—that these organizations could better serve the needs of both researchers and policymakers (IOM 1994). In addition, some states (e.g., Florida, Maryland, Minnesota, New York, and Vermont) have also taken significant steps to develop data capabilities to support health system reform within their own borders. The Robert Wood Johnson Foundation is supporting state efforts to improve data capabilities, including surveys in 10 states of both employers and households to obtain detailed information on insurance coverage and premiums.

It remains unclear whether the system's data needs would be better served by public or private organizations. The accumulation of large databases in governmental organizations raises privacy fears for some, but others are equally fearful of putting these same databases in private hands. The Medicare program has increasingly centralized its databases and reports a nearly flawless record in maintaining their integrity. The Commission has not stated a preference for whether regional data organizations should be public or private. It is more concerned with the ability of these organizations to obtain accurate and valid data, to maintain the privacy and confidentiality of the records, and to do so in a way that will minimize administrative overhead.

DATA STRATEGIES IN MAJOR HEALTH SYSTEM REFORM PROPOSALS

In the time since the Commission last addressed these issues, a number of reform proposals have been formally introduced as bills. Although some proposals lack details in the area of data systems, the overall approaches in several are described below.[2]

In its reform proposal, the Administration calls for a national board to develop and implement a health information system, among other tasks. The system would operate consistent with national privacy and security standards (to be established) and would be implemented in a manner that would reduce administrative costs and time spent on administrative tasks. As part of the system, the national board would oversee establishment of an regional network of electronic data centers to collect, compile, and transmit data. Data would be collected on enrollment, clinical encounters, financial transactions, and so forth. The board would develop standard forms, uniform data sets and uniform definitions, standards for electronic data transmission, and a system of unique identifiers. In developing a system, the board would provide assistance to states, alliances, plans, and providers. Such assistance would include

[2] Some other bills do not address data systems, but call for standard forms and the use of electronic data transmission.

promoting community-based health information systems and patient-care information systems that collect data at the point of care or as a byproduct of the delivery of care.[3]

The Cooper-Breaux bill would set standards for health plans to report data to the national board. The bill, however, does not specify whether the board would receive information in the form of complete raw data, samples of data, or data summaries—just that it would be in a standardized format. The board would perform and distribute analyses that show levels and trends of expenditures, rates and trends in the provision of individual procedures, and (where applicable) price levels and rates of change. The board would establish standards and requirements for electronic data, unless the industry set such standards by a specified time. It would also establish standards for protecting confidentiality.

The Chafee-Thomas bill calls for a federal administrative panel to establish a health care data interchange system to make health care data electronically available on a uniform basis to all participants in the health system. The data standards would be based on existing, widely used criteria and would be designed to include data on enrollment, eligibility, utilization, expenditures, quality, outcomes, and so forth. The bill also calls for strict measures to ensure confidentiality. In general, participants in the health system would be required either to have the capability to interchange data through a uniform working file or to transmit or receive data through a health care information clearinghouse (which simply facilitates the processing and interchange of data) or a health care value-added network (which may provide additional services such as storing data). In addition to the data interchange system, the Chafee-Thomas bill calls for plans to submit data to the states for analysis by both state and federal agencies.

The McDermott-Wellstone bill calls for each state health plan to develop and adopt a uniform patient record database that uses standard software (designated by the national board) and assures patient confidentiality. The database would be used to collect information on patient medical records to allow for quality review and outcomes analysis. The national board would assign unique provider identifiers.

The Stark bill to create an all-payer system (H.R. 200) would establish a national health expenditures reporting system, which would support the national health expenditures budget but would not address other data needs. Details are not provided on data collection, except that responsibility for reporting is given to providers, rather than to plans. In addition, information collected through the reporting system would not identify individual providers. The system could be based on surveys of a sample of health care providers. The bill would also establish a national database on patient outcomes and a national database on enrollee satisfaction.

[3] The Administration's working-group draft of September 7 included discussion of a long-term strategy for a point-of-service information system. Although this system does not appear in the legislation as introduced, it may represent the Administration's vision for a long-term data strategy.

MEETING THE NEEDS OF HEALTH SYSTEM REFORM

The Commission's recommended data strategy could generally support the needs of any of these five proposals, although it differs significantly from Stark's approach of collecting data from providers. Although details are lacking in some cases, all proposals seem to agree on such issues as the need for standardization, support for increased reliance on electronic transmission of data, and a federal guarantee of confidentiality. The proposals vary more in the degree to which they call for centralization of data systems. The Chafee-Thomas bill, for example, puts forth a specific strategy for creating data clearinghouses, although large insurers would not be likely to use them. The Administration's proposal calls for establishment of an electronic data network with regional centers that would collect data from all health plans and providers.

Different approaches to reform do place different demands on data systems that will affect some of the specific steps needed to implement a national data strategy. The Commission addressed the data needs of a system that enforced expenditure limits through rate setting in its report on the design of expenditure limits (PPRC 1993b). The Commission concluded that development of an interim data system to support such a system could be accomplished with several steps. First, Medicare's definitions and claim forms should be used as a starting point for standardization rules, including its specialty designations, its system of Unique Provider Identification Numbers, and its use of Current Procedural Terminology codes. Second, sample data should be obtained from a subset of the larger health plans, including both commercial insurers and Blue Cross Blue Shield plans, and should be evaluated for purposes of setting limits and estimating expenditure growth. In addition, health plans should be required to submit data summaries that show their total spending for health care services by provider type and to open their methodologies for obtaining these summaries to audit by the government or some external organization. Finally, a cutoff period should be set for claims submittal by all providers.

Under the Administration's proposal to use premium limits to enforce expenditure limits, the data needs change from those under a rate-setting approach. Whereas it was important under the rate-setting approach to estimate changes in the volume of services within different categories of providers, the premium limit approach requires data only on the total dollars spent per person.[4] On the other hand, the use of state or substate premium targets calls for extensive data to be available for these smaller regions. The Commission has analyzed the databases available at state and substate levels and has identified serious problems with their adequacy (see Chapter 5).

New data systems will likely be needed to support a system of premium limits enforced at state or substate levels. But several steps might be taken in the interim to mitigate the

[4] To the extent that fee schedules still play a role in this approach, however, sector-specific data may still be necessary.

inadequacies of existing databases, if policymakers choose to move in this direction. First, premium data should be collected from a sample of plans and self-insured firms, with information on benefit packages and cost sharing to support comparisons with a standard benefit package. Efforts are currently under way at both federal and state levels to collect these data.[5] Second, the federal government should complete additional analyses on state spending by service type and by payer (including self-insured firms), together with new analyses of interstate flows of expenditures. Analytical efforts should be made to disaggregate spending data as much as possible by metropolitan statistical area and by county, so that substate targets can be estimated. If this disaggregation is not possible, estimates should be made from Medicare data or private-sector data on the differences in historical spending for substate areas. Finally, data on new populations to be insured by health plans should be collected and analyzed to help estimate adjustments to historical baselines.

These steps will be difficult at best, as demonstrated by the analyses in Chapter 5. These difficulties, in turn, have contributed to the Commission's recommendations that premium limits be implemented only a standby basis until better data become available and that the application of expenditure limits to state or substate areas should be preceded by substantial data development.

In addition to running the payment system or supporting a system of expenditure limits, it is important to reiterate that the Commission's data strategy would provide valuable support in many other areas. Standardized data will be important for evaluating the impact of particular technologies and practice patterns, for tracking geographic variations in practice, for supporting efforts to prevent or reduce medical injuries, and for many other purposes (see Chapters 10, 12, and 15).

ADMINISTRATIVE SIMPLIFICATION AND DATA CLEARINGHOUSES

Most reform proposals have included provisions for administrative simplification both to generate savings and to reduce hassle. Physicians and other practitioners want to use a standard form for each encounter and to send all the forms to one place. The current system fails this criterion, except perhaps for practitioners who work exclusively for one health maintenance organization. Similarly, consumers would like their providers to submit the forms and would like one place to go with questions, but want guarantees that their personal records remain confidential.

The data clearinghouse concept could be an important component in addressing these concerns. Whereas regional data carriers would make sure that government agencies had

[5] Current premiums reflect insurance policies that vary widely from a potential standard benefit package, making adjustments quite difficult. Information would be needed on variations in cost sharing (including deductibles, copayments, and out-of-pocket limits) and benefit variations (e.g., coverage of mental health or preventive services). In addition, the calculation of premium equivalents for self-insured companies would add another complication.

access to the data they need for various monitoring functions, they would not reduce the multiple organizations that providers and consumers confront. They would reduce the administrative burden on providers and consumers only to the extent that they imposed standard forms and definitions.

The data clearinghouse differs from the regional data organization described above because it would replace health plans and third-party payers as the organization actually collecting data from providers and consumers. Under this concept, providers and consumers would send all claims electronically to the clearinghouse, regardless of which payer would ultimately pay the bill. In the case of group-model or staff-model health maintenance organizations that have encounter-based information systems, the plan might continue to collect the data and send them on to the clearinghouse.

The clearinghouse would ensure that the data meet minimal quality standards. It would then make the data available to health plans as needed for functions such as paying providers and monitoring and improving performance. It would also make data available to governments or regional alliances (if they exist) for tracking utilization, monitoring quality, making risk adjustments, and other purposes. Other organizations, such as physician specialty groups, community-based organizations, or research groups, would also receive data where appropriate to their needs.[6]

In effect, data clearinghouses are community utilities or electronic hubs designed to streamline the system for all users. They should bring considerable simplification and savings to the data-collection process, although they would not address other aspects of administrative complexity and hassle, such as the variety of utilization review procedures used by different plans.

The clearinghouse concept remains relatively untested at this time, although the Community Health Management Information System (CHMIS) demonstrations under the sponsorship of the John A. Hartford Foundation are moving into an implementation phase in several states. As they progress, they will provide an initial opportunity to evaluate the feasibility of clearinghouses and their ability to simplify claims submission and payment and to carry out other functions.

The Commission recommends that the federal government support additional demonstration projects of regional data clearinghouses to test their feasibility. In setting up these demonstrations, it will be important to consider such issues as (1) whether these clearinghouses should be public or private, (2) whether they should be linked to states or regional alliances (if they exist), (3) whether participation by health plans should be mandatory or voluntary, and (4) whether they should incorporate data collection at the point

[6] In some cases, the data supplied to such organizations might be stripped of patient identifiers.

of care or remain more in the claims data mode. The involvement of state governments in several of the CHMIS projects, including one in Washington State, will offer a test of the feasibility of a public-private partnership in this arena. In addition, these projects are designed to be fully compatible with efforts to develop computer-based patient records.

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PART III

MEDICARE AND MEDICAID

CHAPTER 17

BENEFICIARIES AND THE MEDICARE FEE SCHEDULE

The legislation establishing Medicare physician payment reform called for monitoring the effect of reform on Medicare beneficiaries. The Omnibus Budget Reconciliation Act of 1989 (OBRA89) directs the Secretary of Health and Human Services to report to the Congress annually on changes in beneficiaries' use of services and access to care, as well as changes in beneficiaries' financial liabilities arising from this care. The Commission is to comment on the Secretary's reports and to offer recommendations to the Congress in these areas.

This chapter presents an overview of the early impact of the Medicare Fee Schedule on beneficiary use of services and access to care. The chapter also summarizes changes in balance billing, participation, and assignment between 1991 and 1993. More detailed analyses of access and beneficiary financial liability will be presented in separate Commission reports, to be issued in mid-1994. The analyses in the access report will address differences among certain vulnerable beneficiary populations—the oldest-old and those who live in urban poverty areas or in Health Professional Shortage Areas (HPSAs)—and other beneficiaries.

In brief, the Commission's findings on access presented in this chapter are as follows:

- Responses to the Medicare Current Beneficiary Survey (CBS) provided at least nine months after the fee schedule was introduced show that access continued to be excellent for most beneficiaries, but that some subgroups continued to face access barriers.

- Surveys conducted by the Commission indicate a relatively low level of beneficiary complaints about access. Those complaints that were reported most often concerned access to primary care physicians for beneficiaries who had moved or otherwise experienced a break in an existing physician relationship.

- An analysis of Medicare claims data from the first six months of 1993 shows that per beneficiary use of services continued to grow after the introduction of the fee schedule, despite payment rate reductions.

- According to a Commission survey, physicians continued to provide a high level of service to Medicare beneficiaries and continued largely to accept Medicare rates as payment in full for their services. Of the physicians surveyed who were accepting any new patients, 95 percent were accepting new Medicare patients.

- The analysis of 1993 Medicare claims data also shows that the proportion of total allowed charges attributable to services provided by participating physicians continued to increase. Further, the proportion of Medicare-allowed charges paid on assignment continued to rise, and the total amount of balance billing continued to decrease.

Given these findings, access to care for most Medicare beneficiaries appears to be good during the early stages of fee schedule implementation. Some vulnerable populations still experience access problems, however, and a beneficiary with a break in an existing physician relationship may have difficulty finding a physician who accepts new Medicare patients. Beyond the findings reported here, the Commission is aware of anecdotal reports that some physicians have responded to Medicare payment rate reductions by limiting their delivery of services to beneficiaries.

The results presented in this chapter are consistent with the Medicare beneficiaries' experience before physician payment reform became effective. Prior to the implementation of the fee schedule, the average Medicare beneficiary had good access to care. Most beneficiaries reported no difficulty in obtaining timely care from a physician, and most physicians accepted Medicare patients. Analysis of claims data showed, however, that access may have been inadequate for certain disadvantaged populations—African American beneficiaries and beneficiaries residing in urban poverty areas and in urban HPSAs (PPRC 1992b).

On the basis of an analysis of Medicare claims from the first six months of 1992, the Commission found that access remained good for most beneficiaries immediately after implementation of the fee schedule. The volume of services per beneficiary continued to grow during that period. The analysis also showed, however, that certain disadvantaged populations who had difficulty obtaining care prior to physician payment reform continued to exhibit both lower utilization and worse health outcomes than other beneficiaries (PPRC 1993c).

An important limitation of the findings presented in this chapter concerns the issue of appropriate services.[1] Ideally, the Commission would like to be able to measure beneficiary access to services needed to improve health outcomes. While it is not possible to distinguish between appropriate and inappropriate services when measuring access with currently available data, the Commission can look for evidence of potential access problems from multiple perspectives with the different types of data used. To the extent it finds such evidence, the Commission can judge whether Medicare beneficiaries appear to be experiencing decreased access to appropriate services and whether policy recommendations are warranted.

[1] A more extensive discussion of the appropriateness of services appears in the Commission's 1993 report on Medicare Volume Performance Standards (PPRC 1993b).

Regardless of the reassuring findings reported here, access to care will remain an important issue. Payment reform may have effects that are not initially apparent. Furthermore, reform may have done little to help those populations most vulnerable to diminished access. The Commission will continue to monitor beneficiaries' access to care as the Medicare Fee Schedule is put into place.

THE COMMISSION'S PRIOR WORK ON ACCESS TO CARE

The Commission's work on Medicare beneficiaries' access to care began in earnest in 1991 with the formation of its Advisory Panel on Access. The panel consists of 10 experts in the area of access to care, including physicians, beneficiary advocates, and health services researchers.[2] The panel meets twice a year to provide the Commission with guidance in the area of access to care and to help the Commission formulate its comments on the Secretary's annual report on Medicare beneficiaries' access.

The Commission issued its first report on access to care in 1991 (PPRC 1991). That report was essentially a work plan, which outlined a strategy of monitoring use of services, hospitalizations, mortality rates, and other health care statistics for beneficiary populations thought to be most vulnerable to a reduction in access to care. These vulnerable populations include socioeconomically disadvantaged groups, those in fragile health, and beneficiaries living in areas where Medicare payment rates were to be reduced under the Medicare Fee Schedule.

The Commission's 1992 report on access implemented this work plan using Medicare claims data from the period before the Medicare Fee Schedule was introduced (PPRC 1992b). Service use, process of care, and outcomes were analyzed using claims and enrollment data for approximately 1.5 million beneficiaries for the period 1986 through 1990. This baseline analysis served both to document access problems that existed before payment reform and to demonstrate the feasibility and validity of a claims-based approach to monitoring access to care.

Problems with obtaining access to care were most evident for three vulnerable populations: African American beneficiaries, beneficiaries residing in urban high-poverty areas, and beneficiaries residing in urban HPSAs. These three populations exhibited a combination of low service use, poor process of care, and below-average health outcomes. These beneficiaries were less likely ever to see a physician during the year. Use of preventive services such as pneumonia vaccines and Pap smears was far below average. Substandard process of care was evidenced by a heavy reliance on hospital emergency rooms and

[2] Panel members are Perham Amsden; Geraldine Dallek; Lynn Etheredge; Harold P. Freeman, M.D.; Lucian Leape, M.D.; Steven H. Long, Ph.D.; Nicole Lurie, M.D.; Ira Moscovice, Ph.D.; Martin F. Shapiro, M.D.; and Barbara Yawn, M.D.

outpatient departments for primary care services. Outcomes such as outlier hospital stays and mortality rates were significantly worse than average.

The Commission noted several steps the federal government might take to improve the health care of these beneficiary groups. The Medicare program already provides a key factor in obtaining access to care: health insurance. Beyond its role as insurer, however, Medicare might take a more direct role in improving access for disadvantaged beneficiaries. Policies could be developed to address problems such as the absence of a usual source of care, the use of emergency departments for primary care services, and the absence of preventive care among vulnerable populations.

More broadly, the federal government might increase its role in directly filling gaps in the delivery system. Programs such as support for community health centers and the National Health Service Corps can make personnel and facilities directly available to the disadvantaged.

In its third report on access, issued in 1993, the Commission used Medicare claims data from the first six months of 1992 to compare beneficiary access before and immediately after fee schedule implementation (PPRC 1993c). Despite fears that changes in Medicare payment policies might limit access, the volume of services per beneficiary grew in early 1992, suggesting that access remained good for most beneficiaries. Disadvantaged populations who had trouble obtaining care before physician payment reform, however, continued to exhibit both lower utilization and worse health outcomes.

The Commission's 1993 access report also made use of information from the first round of the CBS; a survey of physicians conducted by the Commission; and results of informal discussions on access issues with congressional offices, state agencies on aging, and organizations representing Medicare beneficiaries. The analysis of the Current Beneficiary Survey confirmed earlier analyses of 1991 Medicare claims data that access was excellent for most beneficiaries, but that some subgroups faced access barriers.

THE COMMISSION'S CURRENT WORK ON ACCESS TO CARE

This year, the Commission extended its earlier work on access to care. Last year's analysis of Medicare claims data has been updated using 1993 data. In addition, the Commission used results of the fall of 1992 round of the Medicare Current Beneficiary Survey to compare beneficiary access before and after introduction of the fee schedule. Results of a new Commission survey of physicians have also been used to measure the extent to which physicians are accepting new Medicare patients and the amount of time spent with beneficiaries who are seen. Finally, the Commission expanded on earlier efforts to monitor the level of beneficiary complaints about access by surveying all congressional offices and by working with the American Association of Retired Persons (AARP) on a survey of possible access problems.

Current Beneficiary Survey

Last year, the Commission used the CBS to complement its analyses based on Medicare claims. This longitudinal survey provides additional information on important determinants of beneficiaries' health care use such as demographic characteristics, income, health insurance coverage, health status, and physical functioning. In addition, the survey includes specific questions on access to care such as difficulty finding a physician, whether care was delayed for financial reasons, usual source of care, and satisfaction with care. Hence, examination of responses to different measures of access over time can strengthen conclusions based on analyses of claims.

This section describes the CBS and presents the Commission's analyses of the 1992 survey. Last year's analyses used the 1991 survey, which was conducted just before introduction of the Medicare Fee Schedule (the fall of 1991). The 1992 survey, therefore, provides a look at the impact of the first year of payment reform on beneficiary access to care.

Description of the Survey. The CBS is a longitudinal survey of some 12,000 Medicare beneficiaries sponsored by the Health Care Financing Administration's (HCFA) Office of the Actuary. Beginning with the round conducted during 1991, these beneficiaries are interviewed three times per year. The core survey and its supplements collect information on utilization of services, expenditures, health insurance coverage, access to health care services and satisfaction with that care, health status, and physical functioning as well as demographic information.

The CBS sample was constructed to be representative of the Medicare population as a whole. The oldest-old and the disabled under 65 years old were oversampled because, otherwise, the sample size would be too small to draw policy and research conclusions about these populations. Additional beneficiaries were added to replace those no longer in the sample due to death, emigration, or refusal to participate. This supplemental sample includes both newly and previously enrolled Medicare beneficiaries. Of those beneficiaries interviewed in the first survey, 82 percent completed the survey the following year.

Access to Care, Satisfaction, and Quality of Care. In the CBS, beneficiaries are directly asked about their access to care. Some of these questions—such as whether the respondent ever had a medical problem but did not see a physician—are considered direct indicators of access. Another direct measure is whether beneficiaries have a particular physician or physician's office as their usual source of care. Such a physician relationship improves the potential for preventive care and ensures better continuity than in an emergency room. Similarly, continuity is also enhanced if the beneficiary regularly sees the same physician in any setting. By contrast, increased use of emergency rooms by Medicare beneficiaries would be an indicator of access barriers.

Patient satisfaction and perceptions about quality are considered to be indirect indicators of access. It is assumed that when there are barriers to care, beneficiaries will express

dissatisfaction with the care provided. Indirect measures considered here include satisfaction with the availability of care on nights and weekends; beneficiaries' confidence in their physicians; and perceptions about the quality of care provided by their usual source, such as whether the physician takes the time to check everything.

Analyses of the 1992 survey show results comparable to those for 1991; access to care for most beneficiaries continued to be excellent. In 1992, 86 percent identified a physician's office as their usual source of care, or if they obtained care in another setting, saw a particular physician (Table 17-1). About 12 percent had a problem they thought warranted medical attention but did not see a physician. Satisfaction with care also remained high. Fully 92 percent were very satisfied or satisfied with the availability of care at night and on weekends, and about 96 percent were very satisfied or satisfied with the quality of their medical care. In assessing the quality of their care, 93 percent strongly agreed or agreed that their physician checks everything, and 94 percent agreed or strongly agreed with the statement: "You have great confidence in your doctor" (Table 17-2).

Although Medicare beneficiaries reported about the same levels of access in 1991 and 1992, some beneficiaries continued to have more difficulty than others obtaining medical care (Table 17-1). For example, African American and Hispanic beneficiaries were still more likely than whites to have a health problem but fail to see a physician; they were less likely to have a particular physician as their usual source of care. Dual eligibles—those who, along with Medicare, also received Medicaid benefits at any time during the year—also continued to have significantly less access.

Distinctions among groups are also found in satisfaction and rating quality of care. Compared with their counterparts, Hispanics, the disabled, people with functional disabilities, and those without supplemental coverage are less satisfied and disagree more with positive statements about the quality of their care.

Further distinctions between the vulnerable groups are found by making comparisons among beneficiaries who are very satisfied or strongly agree with statements about the quality of their care. For example, only 19 percent of African American beneficiaries strongly agree that their physician checks everything compared with 27 percent of whites, and only 22 percent were very satisfied with the quality of their care compared with 37 percent of whites (Table 17-2). Individuals living in rural areas were also less likely to strongly agree with statements affirming the quality of their care or to be very satisfied with the availability or quality of their care. Hispanics, on the other hand, were more likely to strongly agree that their physician checks everything and to strongly agree that they have great confidence in their physician.

Changes in Access, Satisfaction, and Quality of Care. With longitudinal panels of beneficiaries, changes in individuals' access, satisfaction, and quality can be measured. Responses from beneficiaries interviewed in 1991 and 1992 showed 19 percent were less

Table 17-1. Medicare Beneficiaries Reporting Problems with Access, 1992 (percentage)

Population Group	Had Problem, but Did Not See a Physician	No Usual Source of Care[a]
All Beneficiaries	12	14
Age		
85 or older	8	8
Under 85	12	14
Race		
African American	15	21
Other	16	23
White	12	13
Ethnicity		
Hispanic	18	27
Other	11	13
Medicaid Eligible		
Yes	17	18
No	11	13
Medigap		
No	20	26
Yes	9	10
Reason for Medicare Eligibility		
Disabled or end-stage renal disease	25	21
Aged only	10	13
Functional Disability		
No disability	7	16
Functional disability, no help needed	16	12
Functional disability, help needed	19	9
Urban Health Professional Shortage Area		
Yes	[b]	21
No	[b]	14
Poverty ZIP Code[c]		
Yes	[b]	21
No	[b]	13
Rural Area		
Yes	13	[b]
No	11	[b]

SOURCE: Physician Payment Review Commission analysis of 1992 Current Beneficiary Survey.

[a] Defined as identifying a physician's office or a particular physician as a usual source of care.

[b] No statistically significant difference between population groups at the 5 percent level.

[c] More than 30 percent of the population with income below poverty threshold.

NOTE: This analysis excludes institutionalized beneficiaries and beneficiaries who were members of a group health plan at any time during the year.

Table 17-2. Medicare Beneficiaries' Attitudes Towards the Care They Receive, 1992 (percentage)

Population Group	Doctor Checks Everything: Agrees/ Strongly Agrees	Doctor Checks Everything: Strongly Agrees	Availability of Medicare Care: Satisfied/ Very Satisfied	Availability of Medicare Care: Very Satisfied	Overall Quality of Care: Satisfied/ Very Satisfied	Overall Quality of Care: Very Satisfied	Great Confidence in Doctor: Agrees/ Strongly Agrees	Great Confidence in Doctor: Strongly Agrees
All Beneficiaries	93	26	92	21	96	35	94	27
Age								
85 or older	[a]	[a]	[a]	[a]	[a]	33	96	[a]
Under 85	[a]	[a]	[a]	[a]	[a]	36	94	[a]
Race								
African American	[a]	19	[a]	14	94	22	95	18
Other	[a]	27	[a]	28	93	35	90	24
White	[a]	27	[a]	23	96	37	94	28
Ethnicity								
Hispanic	96	40	88	[a]	[a]	[a]	[a]	37
Other	93	26	93	[a]	[a]	[a]	[a]	27
Medicaid Eligible								
Yes	[a]	24	[a]	20	93	29	92	25
No	[a]	27	[a]	23	96	37	94	28
Medigap								
No	92	23	91	19	92	28	91	23
Yes	94	28	93	24	96	38	95	28
Reason for Medicare Eligibility								
Disabled or end-stage renal disease	91	[a]	88	17	90	28	90	[a]
Aged only	94	[a]	93	23	96	37	95	[a]
Functional Disability								
No disability	94	29	95	26	97	40	96	29
Functional disability, no help needed	92	24	90	20	94	33	93	25
Functional disability, needed help	91	24	88	17	92	28	92	26
Urban HPSA								
Yes	[a]	18	[a]	11	[a]	22	[a]	19
No	[a]	27	[a]	23	[a]	36	[a]	28
Poverty ZIP Code[b]								
Yes	[a]	[a]	[a]	14	[a]	24	[a]	19
No	[a]	[a]	[a]	23	[a]	36	[a]	28
Rural Area								
Yes	92	21	[a]	21	[a]	32	[a]	24
No	94	29	[a]	24	[a]	38	[a]	29

SOURCE: Physician Payment Review Commission analysis of 1992 Current Beneficiary Survey.

[a] No statistically significant difference between population groups at the 5 percent level.

[b] More than 30 percent of the population with income below poverty threshold.

NOTE: This analysis excludes institutionalized beneficiaries and beneficiaries who were members of a group health plan at any time during the year.

satisfied with the availability of medical care, while another 19 percent were more satisfied (Table 17-3).[3] For the most part, lower satisfaction and perceived reduction in quality were offset by greater satisfaction and perceived increases in quality.

Shifts from satisfaction to dissatisfaction occurred rarely. Only 1.2 percent of the beneficiaries said they were satisfied with the availability of medical care in 1991 but were dissatisfied in 1992. Similarly, 2.7 percent changed their answers about satisfaction with the overall quality of the medical care they received. When asked whether they agreed that their physician checked everything, 3.6 percent agreed in 1991 but disagreed in 1992. Changes from agreement to disagreement occurred for 3.1 percent of beneficiaries when asked about their confidence in their doctor. Almost 6 percent of beneficiaries with a particular physician or

Table 17-3. Changes in Medicare Beneficiaries' Attitudes Towards the Care They Receive, 1991 and 1992 (percentage of beneficiaries)

Responses to Satisfaction Questions	
Availability of medical care at night and on weekends	
Satisfaction decreased	18.8
Satisfaction stayed the same	61.8
Satisfaction increased	19.4
Overall quality of medical care received in last year	
Satisfaction decreased	22.4
Satisfaction stayed the same	60.1
Satisfaction increased	17.5
Responses to Quality of Care Questions	
Doctor is very careful to check everything when examining you	
Quality decreased	21.1
Quality stayed the same	62.3
Quality increased	16.6
You have great confidence in your doctor	
Quality decreased	20.2
Quality stayed the same	65.8
Quality increased	14.0

SOURCE: Physician Payment Review Commission analysis of 1991 and 1992 Current Beneficiary Surveys.

NOTE: This analysis uses a cohort of beneficiaries interviewed in both years. It excludes institutionalized beneficiaries and beneficiaries who were members of a group health plan at any time during 1991 and 1992.

[3] For quality and satisfaction questions, the CBS uses a four-point scale for responses: strongly agree, agree, disagree, strongly disagree, and very satisfied, satisfied, unsatisfied, and very unsatisfied, respectively. Changes were measured as shifts in the responses along these scales.

physician's office as their usual source of care in 1991 no longer had one in 1992. Offsetting this, 6 percent of beneficiaries without a usual source of care in 1991 had one in 1992.

The Commission's analysis of access focuses on vulnerable populations because these groups may be more likely to have problems of access and reduced quality resulting from changes in Medicare payment policy. Similar comparisons were made for the oldest-old; race; and for beneficiaries living in urban HPSAs, poverty areas, and rural areas. No changes were found for these groups from 1991 to 1992 for any of the measures of access, quality, and satisfaction.

Commission Survey of Physicians

The Commission contracted with National Opinion Research Center to survey 1,000 physicians regarding their attitudes toward Medicare and other payers, recent changes in practice style, and other aspects of the delivery and financing of medical care. The survey was administered by telephone from November 1993 to March 1994, about two years into the implementation of the Medicare Fee Schedule.[4] This section uses the survey to analyze physicians' acceptance of new Medicare patients and their willingness to spend time with Medicare patients.

In general, physicians continued to serve Medicare beneficiaries and to accept Medicare rates as payment in full for their services. Many physicians reported spending less discretionary time with patients and their families today compared with three years ago, but this change was reported for all patients, not solely those covered by Medicare.

Accepting New Medicare Patients. The implementation of the Medicare Fee Schedule has not caused physicians to close their practices to Medicare patients. Of those physicians responding to the Commission's survey, 94 percent were accepting new patients into their practices. Of these, the proportion of physicians accepting new Medicare patients (96 percent) was roughly the same as those accepting new privately insured, fee-for-service patients or those belonging to preferred provider organizations (97 percent). By contrast, only about three-quarters of the physicians seeking new patients were accepting new Medicaid patients or patients insured under capitated arrangements. These results are very similar to those from the Commission's previous survey of physicians in 1992 (PPRC 1993a; Louis Harris and Associates, Inc. 1993).[5]

The few physicians who were selectively not accepting new Medicare beneficiaries in 1993 (while accepting other types of patients) devoted a smaller percentage of their practices to

[4] Additional results from the survey are presented in Chapter 19. Only those questions most directly relevant to access to care are presented here.

[5] In 1992, 94 percent of physicians were accepting new patients. Of those accepting new patients, 94 percent were accepting Medicare fee-for-service patients.

Medicare patients compared with other physicians. This suggests that even before the Medicare Fee Schedule was implemented, they had smaller Medicare practices.

Physicians who selectively closed their door to Medicare patients accounted for less than 4 percent of all physicians surveyed.[6] Although this is one indicator of good access for Medicare beneficiaries, it would be prudent to monitor this phenomenon.

Spending Time with Medicare Patients. It is also important to know whether physicians are treating their current Medicare patients any differently, for instance, by spending less time with them than before. The changes revealed by the survey are of some concern, but not just for Medicare patients. They are affecting patients with all types of insurance.

About one-third of physicians say that, compared with three years ago, they are spending less discretionary time with patients and families during visits, spending less time answering patient and family questions over the telephone, or more often referring patients to other sources of care after hours. Primary care physicians were significantly more likely than others to make these changes in their practices.

The vast majority of the physicians who have made these changes did so for all types of patients they treat, handling Medicare patients the same as others. Of all physicians, only nine percent indicated that they have selectively changed their practices for Medicare patients, while the same proportions reported that they selectively changed their practices for each type of payer. According to the most recent survey, Medicare patients are not being treated differently than other patients, although the previous survey sponsored by the Commission found some evidence that this was happening (PPRC 1993a).

Beneficiary Complaint Data

The Commission was involved in two surveys during 1993 to determine the level of beneficiary complaints about access to care. One was a comprehensive mail survey of all 540 congressional offices to determine the volume of complaints those offices had received. In addition, the Commission worked closely with the AARP on a brief mail-in questionnaire that was included in the November 1993 issue of the AARP *Bulletin*.[7]

Complaint data of this type clearly must be interpreted with caution. Rates and results reflect individuals who expected to have good access to care but did not obtain it and were willing to express that in writing. Such data may underrepresent the true scope of any access problem, particularly for the vulnerable populations identified in prior Commission work.

[6] In 1992 less than 5 percent of physicians were not accepting new Medicare patients, but were accepting other patients (PPRC 1993a).

[7] Details of the surveys and results are given in Appendix B.

Even if these data do not accurately quantify problems with access, they provide two independent sources of qualitative information on access-related complaints. In fact, these two quite different sources of information tell much the same qualitative story.

First, on a national basis, complaint rates appear quite low. The two surveys yielded one complaint per year for every 4,000 to 8,000 beneficiaries. In the survey of congressional offices, nearly 60 percent of the 256 offices that responded to the Commission's survey reported that they had not received any access-related complaints from Medicare beneficiaries. Of those who did receive complaints, more than 70 percent said they received 5 or fewer complaints in any typical month. In the AARP survey, of the more than 15 million Medicare beneficiaries receiving the monthly *Bulletin,* fewer than 1,800 returned the questionnaire.

Second, access problems centered around primary care physicians. Of congressional offices that mentioned physician specialty, more than half the responses were for family practice, general practice, and internal medicine physicians. In the AARP survey, problems in finding primary care physicians were noted in 60 percent of responses. In most cases, beneficiaries were trying to find a new primary care physician after moving or after their previous physician had moved or retired.

The finding that primary care is the center of beneficiaries' access complaints is reinforced by recent physician surveys. The Commission's 1992 survey of physicians found that 10 percent of primary care physicians were not accepting new Medicare patients, versus 3 to 4 percent for other specialties (Louis Harris and Associates, Inc. 1993). Similarly, a 1992 American Medical Association (AMA) survey found that 9 percent of primary care physicians were accepting no new Medicare patients, versus 4 percent for other physicians (Lee and Gillis 1993). Other survey results indicate the problem may be even larger.[8]

The finding regarding primary care physicians is difficult to reconcile with recent changes in Medicare payment policy. Payment rates for primary care physicians have risen modestly on average in recent years, while those for surgeons and medical subspecialists have fallen. These payment rate increases may, however, have gone largely unnoticed or fallen short of expectations.[9]

The finding regarding primary care physicians probably makes more sense when examined in the context of physician supply. There is generally a shortage of primary care physicians and their practices are far more likely to be completely full.[10] This suggests that low physician

[8] The AMA survey found that less than 70 percent of primary care physicians (versus 80 percent of other physicians) were accepting all new Medicare patients (Lee and Gillis 1993). In a 1992 survey of members of the American Academy of Family Physicians, 28 percent reported not accepting new Medicare patients (AAFP 1993).

[9] The Commission's survey of physicians found that physicians significantly underestimated fee increases (PPRC 1993a).

[10] In the Commission's 1992 survey of physicians, 8 percent of primary care physicians were taking no new patients, versus 1 percent of other physicians (Louis Harris and Associates, Inc. 1993).

supply and full schedules may be more significant than the recent payment rate changes in determining physicians' decisions to accept new Medicare patients.[11]

Analysis of Claims Data, 1991-1993

The Commission's preliminary analysis of Medicare claims data from the first six months of 1993 shows that use of services per beneficiary continued to climb between 1991 and 1993, despite reductions in payment rates.[12] While use of some services decreased, comparison of Medicare carrier areas, grouped in terms of size of payment rate changes, fails to show a clear relationship between magnitudes of payment rate changes and changes in service use.

Methods. Medicare beneficiaries' service use during the first half of 1993 was contrasted to service use during the first six months of 1991.[13] Data consisted of all physicians' services claims for a 5 percent sample of beneficiaries. Claims were tabulated by the Medicare carrier area in which services were delivered, and all analysis was done by the location in which the service was performed.[14]

Three factors add a large measure of uncertainty to the data presented here. First, the 1993 procedure codes for visits and consultations are completely different from those used in 1991. To analyze the data, the old codes were matched to the new ones using a crosswalk developed by HCFA. Inaccuracy in this crosswalk and variations in use of the old codes add a significant margin for error in the analysis of changes in visit services. Second, these files are incomplete, including only those claims processed through September of each year.[15] Analysis of the distribution of claims per month shows that the 1991 and 1993 files are roughly equally complete. Estimated growth in the quantity of care will, therefore, reflect both the true change in the quantity of services delivered and any small residual variations in the completeness of the

[11] If a physician's practice is full, the decision to accept a new Medicare patient crowds out a better paying privately insured patient, lowering total revenues. If the practice is not full, however, acceptance of a new Medicare patient does not crowd out existing patients and total revenues rise.

[12] This analysis averages across all beneficiaries. The Commission's forthcoming report on access will examine various vulnerable populations separately.

[13] The Commission's ability to analyze 1993 claims at this time is a direct benefit of HCFA's National Claims History (NCH) system. Prior to the NCH, 1993 data would not have been available until late 1994. With the NCH, however, HCFA receives all Part B claims in a timely fashion. Through a significant effort on the part of HCFA Bureau of Data Management and Strategy staff, the Commission now receives a sample of claims data as they are processed each quarter.

[14] The locality in which the service is delivered sometimes differs from the locality in which the beneficiary lives because beneficiaries, particularly those in rural areas, sometimes travel some distance to see a physician.

[15] This cutoff was necessary because the most recent 1993 data included only those claims processed through September 1993. The same cutoff was used with the 1991 data to insure comparability with the 1993 data.

files because of claims runout.[16] Finally, given the 5 percent sample of claims used in the analysis, the payment rate and service use measures presented are subject to sampling error. These errors are likely to be greatest with respect to low-volume procedures such as arthroscopy.

Two measures of service use were calculated. First, simple counts of services were tabulated. These counts do not reflect changes in the mix of services from, for example, less complicated to more complicated procedures. Second, an index of the total volume of care was created. To construct this index, counts of services are weighted in proportion to the payment rate for the service. For example, a $1,000 cataract surgery would be weighted as heavily as 10 consultations costing $100 each. This volume index captures changes in the total number of services as well as changes in the mix of services.[17]

In most cases, the volume index measures change more accurately than counts of services. Visit services are an important exception, however. As noted above, analysis of the volume of visits relies on a potentially inaccurate crosswalk from the old to the new visit codes. The count of visits, by contrast, does not rely as heavily on the crosswalk. Since the crosswalk captures an entire class of codes, a count of services should provide a good indicator of changes in the level of care.[18]

Results. Across all services, the total quantity of care per beneficiary increased at an annual rate of 4.2 percent between 1991 and 1993 (Table 17-4). This increase occurred despite an overall 1.3 percent annual decrease in payment rates. Nearly all service groups showed increases, except for cataract lens replacement, mammography, and routine diagnostic radiology. By and large, procedure use continued to grow more rapidly than use of visit services despite reductions in payment rates for procedures.

The 4.2 percent growth rate in use of services for the two years ending in 1993 is somewhat lower than that before the Medicare Fee Schedule was introduced. The annual growth rate for the five years ending in 1991 was 7.1 percent (Board of Trustees 1993). Whether this relatively low growth in service use represents a trend is unclear because the rate of growth in the quantity of services has been quite volatile. For example, in the 10 years ending in 1991,

[16] A number of other factors also lead to some uncertainty, including changes in the global surgical service period and the bundling of certain services into the office visit. Medicare Part B monthly cash outlays also appear to have been more volatile in 1993 than in 1992 (Department of the Treasury 1993).

[17] Volume growth is measured by asking how much outlays would have risen if prices had been frozen. This is computed directly from data on individual services, calculating the total cost of 1993 services at 1991 prices, then comparing this to actual 1991 outlays.

[18] For office visits, for example, the accuracy of the quantity index depends on each old code being accurately mapped to a new code. By contrast, a count of services will provide a good measure of physician contacts so long as all office visits under the old system are recorded as office visits under the new system.

Table 17-4. Average Annual Change in Service Payments and Quantities Per Beneficiary for Selected Types of Services, 1991-1993 (percentage)

Type of Service	Payment Per Service	Volume[a]	Count of Services[b]	Percentage of 1993 Physicians' Services Outlays
All Services	-1.3	4.2	3.1	100
Cardiac Procedures				
Angioplasty	-11.1	19.0	20.3	0.6
Cardiac catheterization	-11.0	7.4	6.7	1.5
Endoscopy				
Lower gastrointestinal	-8.6	3.8	-2.4	1.6
Upper gastrointestinal	-9.1	3.4	1.6	1.1
Other	-6.0	7.6	3.8	1.5
Surgery				
Arthroscopy	-7.4	12.7	11.3	0.2
Joint prosthesis	-7.2	8.3	7.2	1.4
Cataract lens replacement	-7.6	-2.8	-3.0	3.7
Coronary artery bypass graft	-9.7	8.4	12.8	1.2
Radiology				
CAT scans	-6.1	3.1	4.5	1.6
Magnetic resonance imaging	-4.9	17.8	12.5	1.0
Mammography, all	-4.6	-0.6	1.9	0.5
Other diagnostic	-6.4	-1.6	1.7	3.8
Visits				
Office	3.9	2.3	2.0	15.4
Hospital	4.9	4.3	1.2	11.9
Nursing/rest home	12.1	1.9	5.0	1.5
Emergency room	9.9	2.3	5.7	2.1

SOURCE: Physician Payment Review Commission analysis of 1991-1993 Medicare claims, 5 percent beneficiary file.

[a] Measures change in outlays if prices were frozen (volume and intensity).

[b] Measures change in the number of services only.

NOTE: Data are for the first six months of each year.

annual growth rates ranged from 3.7 percent to 10.0 percent (Board of Trustees 1993). The 1991 to 1993 growth rate is also the lowest two-year growth rate since the 3.9 percent rate for the two years ending in 1985.

A better approach to assessing the impact of payment rate changes on access is to analyze service volume changes separately by Medicare carrier area.[19] For each group of services (and for total services), carriers were divided into three groups based on the size of the change in average payment rate per service between 1991 and 1993.[20] The areas with the largest, average, and smallest payment rate reductions were then contrasted in terms of growth in quantity of care and number of services per beneficiary.[21]

This analysis does not support the notion that payment rate reductions have begun to limit access to care (Tables 17-5 and 17-6). If payment rate reductions were leading to decreases in service use and, possibly, limits on access, the lowest percentages would be expected to appear in the columns entitled "largest reduction or smallest increase" in Tables 17-5 and 17-6. The highest percentages would be expected to appear in the "smallest reduction or largest increase" columns. In general, such a monotonic relationship between payment rate changes and changes in service use was not found. In some cases (e.g., arthroscopy), quantity growth was highest in those areas experiencing the greatest payment rate cuts. In other categories of service, high payment rate reductions were accompanied by relatively low quantity growth (e.g., joint prosthesis).

There was a relatively small difference in the volume growth for all services between areas with the largest and smallest payment rate reductions (5.3 percent and 4.7 percent, respectively) (Table 17-5). This finding differs somewhat from the one reported in the Commission's 1993 annual report. In that report, a comparison of first-half 1991 and first-half 1992 claims showed an all-services volume growth of 8.2 percent in areas with the largest payment rate reductions, 4.0 percent growth in areas with an average level of payment rate reductions, and 5.6 percent growth in areas with the smallest payment rate reductions. These differences led the Commission to conclude in 1993 that the growth in service use appeared to be highest in areas having the largest cuts in payment rates. The smaller differences in 1991 to 1993 growth rates, for all services, ranging from 3.1 percent to 5.3 percent, suggest that further experience with the fee schedule moderated the disparity in growth of service use between areas receiving small and large cuts in payment rates.

[19] Carrier areas typically correspond to states.

[20] A limitation of this carrier area analysis is that variation in fee changes between areas with large and small payment changes is not as great as it had been in previous carrier area analyses. Between 1991 and 1993, the annual percentage change in payment per service for all services was -3.0 percent, in areas with the largest fee reductions, and was +0.3 percent, in areas with the smallest fee reductions, for a difference of 3.3 percent. By contrast, this difference was 4.5 percent in a similar comparison of carrier areas using data from 1991 and 1992.

[21] An alternative analytical technique is to compute a correlation coefficient for the relationship between carrier area payment rate and volume changes. The Pearson coefficient for the correlation between the carrier area-specific all services payment rate and volume changes is a very low 0.02 suggesting that there is little or no relationship between the overall payment rate and volume changes between 1991 and 1993.

Table 17-5. Average Annual Change in Service Volume Per Beneficiary in Areas with Small and Large Payment Changes, for Selected Types of Services, 1991-1993 (percentage)

Type of Service	Largest Reduction or Smallest Increase	Average Change	Smallest Reduction or Largest Increase
All Services	5.3	3.1	4.7
Cardiac Procedures			
Angioplasty	17.2	16.5	24.7
Cardiac catheterization	6.7	7.3	8.7
Endoscopy			
Lower gastrointestinal	2.3	6.0	3.5
Upper gastrointestinal	6.6	2.5	1.9
Other	8.3	7.5	7.8
Surgery			
Arthroscopy	17.7	15.2	8.0
Joint prosthesis	3.2	5.8	17.5
Cataract lens replacement	1.0	-2.0	-5.8
Coronary artery bypass graft	5.9	10.6	8.7
Radiology			
CAT scans	2.2	3.4	4.2
Magnetic resonance imaging	12.6	18.8	22.1
Mammography, all	-2.2	1.0	-0.2
Other diagnostic	-1.6	-1.1	-1.7
Visits			
Office	4.7	2.9	0.5
Hospital	5.9	4.1	3.5
Nursing/rest home	5.8	1.2	-0.4
Emergency room	1.7	1.9	4.3

SOURCE: Physician Payment Review Commission analysis of 1991-1993 Medicare claims, 5 percent beneficiary file.

NOTES: Data are for the first six months of each year. Service volume measures change in outlays if prices were frozen (volume and intensity).

Table 17-6. Average Annual Change in Service Counts Per Beneficiary in Areas with Small and Large Payment Changes, for Selected Types of Services, 1991-1993 (percentage)

Type of Service	Largest Reduction or Smallest Increase	Average Change	Smallest Reduction or Largest Increase
All Services	3.6	2.1	4.1
Cardiac Procedures			
Angioplasty	17.5	17.4	26.3
Cardiac catheterization	8.4	4.9	8.2
Endoscopy			
Lower gastrointestinal	-4.2	-1.1	-1.7
Upper gastrointestinal	4.6	0.7	0.6
Other	4.4	3.4	4.3
Surgery			
Arthroscopy	17.4	15.9	5.0
Joint prosthesis	1.8	5.3	15.2
Cataract lens replacement	0.6	-2.1	-6.0
Coronary artery bypass graft	9.5	15.0	13.9
Radiology			
CAT scans	5.0	4.9	4.0
Magnetic resonance imaging	9.2	13.9	15.2
Mammography, all	0.7	3.7	1.7
Other diagnostic	1.7	2.1	1.9
Visits			
Office	2.6	2.9	1.4
Hospital	1.4	1.8	0.9
Nursing/rest home	6.9	5.1	4.1
Emergency room	3.3	6.3	7.4

SOURCE: Physician Payment Review Commission analysis of 1991-1993 Medicare claims, 5 percent beneficiary file.

NOTES: Data are for the first six months of each year. Payment changes and areas were calculated separately for each type of service. Service counts measures growth in the number of services only.

Returning to the 2.8 percent decrease in volume for cataract lens replacement noted in Table 17-4, the analysis by carrier area does not appear to show a relationship between reductions in payment rates and the decrease in volume of these procedures.[22] The areas having the largest payment rate reductions were the only ones where service use grew between 1991 and 1993. Because cataract lens replacement procedures are responsible for a relatively large share (3.7 percent) of Medicare Part B expenditures, the Commission chose to explore reasons for the decrease in volume.

Recognizing that cataract lens replacements are among a group of cataract procedures for which payment rates were reduced under OBRA87, the Commission examined historical changes in lens replacement payment rates and volume from 1987 through 1993. It did this to compare the volume decrease in 1993 with volume changes in other years. Medicare payment rates for lens replacements decreased each year except in 1989, when they rose only 0.1 percent (Figure 17-1). By contrast, other than a 0.8 percent decrease in 1989, volume per beneficiary rose until the relatively sharp decrease of 8.3 percent in 1993.

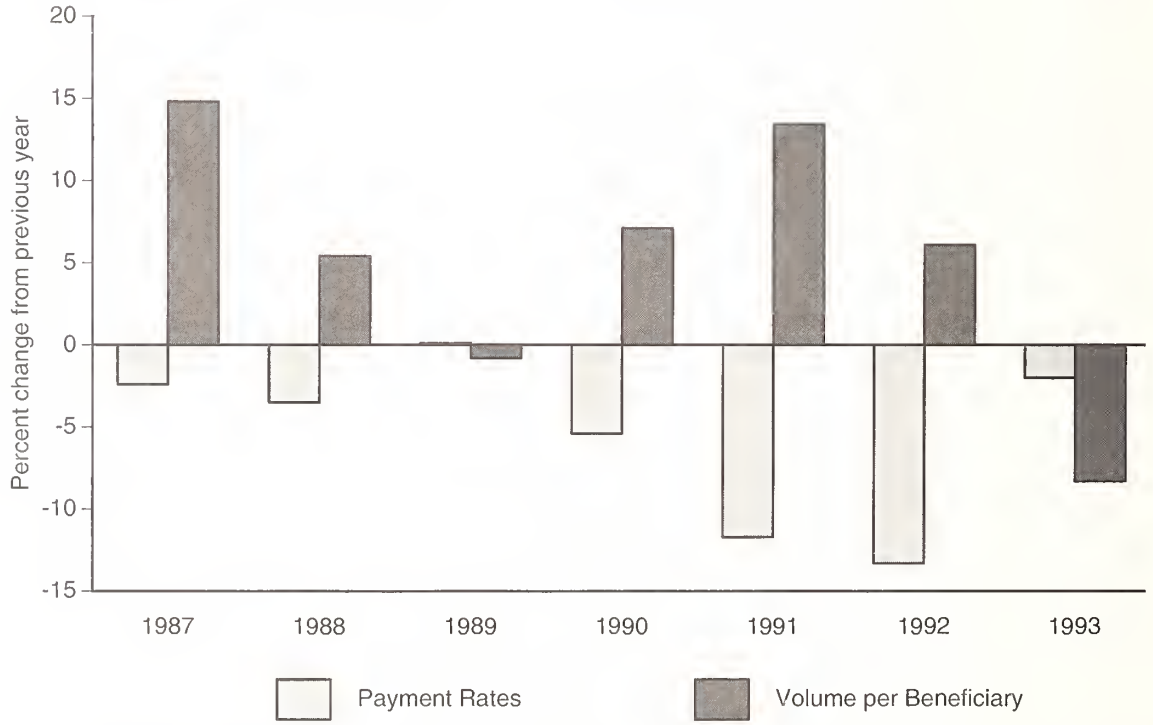
Given the payment rate and volume changes shown in Figure 17-1, a number of explanations for the 1993 drop in the volume of cataract lens replacements seem plausible. First is possible depletion of the backlog of potential lens replacement patients. This backlog was created in the early 1980s when technological changes in cataract surgery made surgery attractive for a new group of patients (Stark et al. 1989). With the depletion of this pool of patients over time, the volume of lens replacement procedures per beneficiary would decrease. A second explanation might be physicians' responses to payment rate reductions. In the short run, physicians may react to lower payment rates by increasing the volume of procedures they perform to maintain their incomes. Such behavior might explain some of the volume increases shown in Figure 17-1. Over time, however, physicians may substitute other services because they are relatively more profitable. In any case, substitution of procedures could explain the decrease in cataract lens replacement volume. Other reasons for this decrease are also possible. Even though the Commission cannot offer a definitive explanation, it will continue to monitor the use of lens replacement and other services, mindful of the possible implications lower volume has for access to care.

[22] Decreases in the volumes of mammography and routine diagnostic radiology procedures were also noted with respect to Table 17-4. Given that these volume decreases are coupled with increases in counts of services, the volume decreases appear to reflect changes in service mix more than changes in service use that may be related to beneficiary access. For example, the decrease in mammography volume of 0.6 percent and the increase in the count of mammography procedures of 1.9 percent reflect a shift in service mix away from bilateral, non-screening procedures and toward bilateral screening procedures. Since the fees for non-screening procedures are on average higher than those for the screening procedures, the fee-weighted volume of mammography decreased given the number of procedures provided. But because the total number of all types of mammography procedures per beneficiary increased, the unweighted simple count of services per beneficiary increased. The shift toward bilateral screening procedures appears to be a result of the implementation of OBRA90, which extended Medicare coverage to include screening mammography services.

Beneficiary Financial Protection

One important goal of physician payment reform was financial protection of Medicare beneficiaries. This was addressed through limiting the amounts physicians can charge above what Medicare pays, prohibiting balance billing of beneficiaries whose cost sharing amounts are paid by Medicaid, and giving physicians incentives to sign Participating Physician and Supplier (PAR) agreements where they consent to submit all claims for services on assignment. To measure achievement of this goal, the Commission analyzed Medicare claims data from the first six months of 1993 and preliminary results of its survey of physicians. More extensive analysis of financial liability of Medicare beneficiaries for physician services will appear in the Commission's forthcoming report on this subject.

Figure 17-1. Payment Rates and Volume per Beneficiary, Cataract Lens Replacement



SOURCE: Physicians Payment Review Commission analysis of 1986-1991 Medicare claims, 100 percent summary file, and 1991-1993 Medicare claims, 5 percent beneficiary file.

The increase in participation and assignment between 1991 and 1992, noted in the Commission's *Annual Report to Congress 1993* (PPRC 1993a), continued in 1993. Participation, measured as the percentage of allowed charges billed by participating physicians, rose to 83 percent in 1993 from 75 percent in 1992 and 70 percent in 1991. Assignment, measured as the percentage of allowed charges paid on assignment, climbed to

92 percent in 1993 from 87 percent in 1992 and 85 percent in 1991. Greater participation and assignment rates suggest that payment reform has not adversely affected physicians' willingness to be participating physicians and to accept assignment.

Claims data also show a decrease in the total amount of balance billing.[23] Balance billing was 1.4 percent of total allowed charges in 1993, having fallen from 7.0 percent in 1990 before new balance billing limits became effective (Committee on Ways and Means 1992). This 80 percent drop in the rate of balance billing exceeds the Commission's earlier projection of 74 percent—a projection that did not forecast changes in physicians' assignment behavior (PPRC 1992a).

THE PLANS FOR FURTHER WORK ON ACCESS TO CARE

Analyses of claims and survey data from the early stages of implementation of the Medicare Fee Schedule do not show a clear relationship between payment rate changes, accompanying use of the fee schedule, and changes in access to physician services for Medicare beneficiaries. While these early indications are reassuring, continued monitoring of access remains important. Payment reform may have effects that are not apparent initially. The Commission plans to conduct more in-depth analyses of available data, with special emphasis on the experience of disadvantaged populations. These analyses will be the subject of a comprehensive report on beneficiary access scheduled for mid-1994.

The Commission's plans for further analyses of beneficiary access address a number of issues. First, an analysis of Medicare claims that addresses the demographic characteristics of the beneficiary population will be used to determine whether those populations with a history of poor access have lost ground during implementation of the fee schedule. Second, the analysis of the Current Beneficiary Survey will be extended to include consideration of the size of payment rate changes in areas where survey participants receive care. The CBS analysis will also incorporate beneficiary demographic information collected during the survey.

In a third area, the Commission will use the National Claims History Provider File (PF) to measure the willingness of physicians to serve Medicare beneficiaries. The PF includes information from all Medicare claims submitted by a sample of Medicare physicians in each state. By contrasting, for example, the number of patients served by each physician in 1991 and 1992, the Commission may be able to learn about the willingness of physicians to serve beneficiaries before and after the fee schedule was introduced. Decreases may lead to reductions in access. The PF also permits the Commission to examine changes in Medicare patient concentration among a smaller number or proportion of physicians over time.

[23] The amount of balance billing was estimated as the difference between submitted and allowed charges on unassigned claims. It is unknown how much of this difference is actually collected by physicians.

Concentration of patients among fewer physicians could limit beneficiary choice.

Finally, the Commission plans to use information on patient diagnoses now included in Medicare claims files. One planned use of diagnoses is a comparison of emergency room use by different groups of beneficiaries. Diagnoses will help the Commission understand the extent to which various groups use emergency rooms for care of chronic conditions. Use of emergency rooms for chronic conditions may be an indicator of access problems.

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CHAPTER 18

ACCESS FOR MEDICAID BENEFICIARIES

In considering Medicaid policy options, the Commission has been guided by the principle that Medicaid beneficiaries should have access to medical care comparable to that experienced by Medicare beneficiaries. A similar principle was embodied in the provision of the Omnibus Budget Reconciliation Act of 1989 (OBRA89) requiring states to guarantee access for pediatric and obstetric services comparable to that for the general population.

Although a critical element in achieving the goal of comparable access is the ability to measure and monitor access in all states, until recently states were not obligated to demonstrate compliance with this requirement. Under the OBRA89 equal access provision, states must now submit documentation to the Health Care Financing Administration (HCFA) each April demonstrating that payment levels for pediatric and obstetric services are sufficient to ensure access.

The Commission identified several problems with this approach to monitoring access (PPRC 1993). First, state Medicaid programs often do not have the information needed to make the required assurances. Second, it is not clear that the information required in the documentation is meaningful. For example, although states must certify that at least 50 percent of obstetric and pediatric practitioners are Medicaid participants, few can demonstrate whether physicians enrolled in the Medicaid program accept all presenting Medicaid beneficiaries or the extent of their Medicaid case load. Third, states that have sought to improve access by putting Medicaid dollars into alternative delivery systems, such as public health clinics or community health centers, enter the process disadvantaged. This is because these providers cannot be counted as obstetric and pediatric practitioners though they may serve a substantial Medicaid population. Finally, since HCFA regional offices review states' compliance with this provision, another sensitive issue is variation in enforcement standards across regions.

Despite these shortcomings, the equal access provision of OBRA89 remains an important tool for advocates to use in securing policy changes through the courts. Although Medicaid officials express frustration with the requirements imposed by the law, most support its intent. State officials are frustrated, however, that resources used in submitting and resubmitting plan amendments could be better used to secure real improvements in access.

Previously, the Commission expressed its concern that Medicaid fee levels are too low to ensure that access for Medicaid beneficiaries is comparable to that afforded other populations (PPRC 1991). In this chapter, new information is presented on Medicaid fee levels. Given low Medicaid fees in most states, effectively monitoring access to care is important to improving access for Medicaid beneficiaries. This chapter includes a recommendation

concerning the use of a survey to monitor access in each state. Final development of such a survey should wait until the direction of health care reform is better known, however.

RECOMMENDATION

The Congress should fund a periodic survey of Medicaid beneficiaries to monitor their access to care. If health care reform is enacted, the Congress should fund a broader survey of low-income persons to monitor their access. In either case, the survey sample size should be adequate to measure access for such populations in each state.

MEDICAID ACCESS CONCERNS

When Medicaid fees are considerably lower than those of other payers, program beneficiaries experience difficulties in obtaining access to care. Previously, the Commission expressed its concern that as long as Medicaid fees remained low, Medicaid beneficiaries would not enjoy access to care comparable to that of beneficiaries of other federally financed programs, most notably Medicare (PPRC 1991). In Chapter 9, the Commission recommends that if the Medicaid program continues to exist under health reform, Medicaid fees should be raised to Medicare's levels.

Previous studies have demonstrated that when Medicaid's fees are below those of Medicare and other insurers, Medicaid beneficiaries experience access problems. Studies of participation rates suggest that physicians are likelier to treat Medicaid patients—and more of them—if the fee levels are more comparable with those of other insurers (Mitchell 1991; Yudkowsky et al. 1990; Fox et al. 1992). Other studies have found that while fee levels influence the site of care, they do not affect access to it. Medicaid beneficiaries in states with higher fees are more likely to receive care in physicians' offices. Conversely, those in states with lower fees are more likely to receive care in emergency rooms and hospital outpatient departments (Long et al. 1986; Cohen 1993).

According to a Commission-sponsored survey, only 65 percent of physicians who were accepting new patients agreed to take Medicaid patients in 1992. By contrast, 97 percent were accepting privately insured fee-for-service patients, and 93 percent were accepting fee-for-service Medicare patients.[1] More troubling, primary care physicians were less likely than other physicians to accept new Medicaid patients (Louis Harris and Associates, Inc. 1993).

[1] Due to the survey's primary focus on Medicare issues, pediatricians, radiologists, anesthesiologists, pathologists, and physicians who did not have at least 10 percent of their patient load in Medicare were excluded from the survey. The analysis presented here differs slightly from that of Louis Harris and Associates because of data cleaning. For information about this Commission-sponsored survey, see Louis Harris and Associates, Inc. 1993.

The surveyed physicians cited low fees as the most serious problem with the Medicaid program. Of those physicians who spent at least 10 percent of patient care time with Medicaid patients, 60 percent thought there was a very serious problem with Medicaid fee levels. By contrast, 25 percent thought there were very serious problems associated with the Medicaid programs' external review and limitations on clinical decisions. Paperwork and billing hassles were regarded as very serious problems by 43 percent (Louis Harris and Associates, Inc. 1993).

Low Medicaid fees also affect payments for services provided to some Medicare beneficiaries who are dually eligible for Medicaid. Some 26 states and the District of Columbia cap their payment of Medicare coinsurance and deductibles at the Medicaid payment amount. For example, if the Medicaid fee for the service is lower than or equal to 80 percent of Medicare's allowed amount, these states consider that the payment has been made in full, refusing to pay the coinsurance.

MEDICAID FEES

In 1991, the Commission presented a report to the Congress on Medicaid physician fees and related aspects of that program. Survey data gathered for the Commission revealed that payments across states varied markedly and that Medicaid payments were considerably lower than Medicare-allowed charges (PPRC 1991).

This section updates information on Medicaid fees. The Commission collected data from state Medicaid officials on actual fees for common services Medicaid beneficiaries used in 1993. The data confirm earlier analyses indicating that, except for maternity care, Medicaid pays physicians considerably less than Medicare. Medicaid fees appear to be closer to Medicare payments than shown in the Commission's previous analysis, however. These data also show continued wide variations in Medicaid physician fees across states and in the levels of Medicaid fees relative to those of Medicare.

Medicaid Fee Survey

The Commission contracted with the Intergovernmental Health Policy Project (IHPP) to survey state Medicaid programs on fees that were in effect on July 31, 1993. All states and the District of Columbia responded to the questionnaire.

Fees were collected for 48 high-volume services, ranging from office visits to deliveries. For services that many specialties provide, such as office visits and chest X-rays, fees were collected for several specialties. Most states, however, have few if any specialty fee differentials. Since some states pay differently for the same service in various locations or for distinct population groups, fees for those areas or groups were collected. Indiana, for example, has different fees for metropolitan, urban, and rural areas. Illinois is also illustrative. In many cases, its Medicaid program pays more for a service to a child than to an adult. Ranges of fees are displayed in the following tables because there may be multiple fees for the same service in some states.

Medicaid Physician Fees

This section presents information on comparisons of Medicaid fees with those of other payers, changes in Medicaid fees, and variations in Medicaid fees across states.

Comparing Medicaid Fees with Those of Other Insurers. If Medicaid physician fees are significantly below those paid by other insurers, Medicaid beneficiaries may be at a disadvantage in gaining access to care in physicians' offices. Previous research suggests that when others pay higher rates than Medicaid, physicians are less likely to serve Medicaid patients. The Commission's most recent data demonstrate that, for some states, the differences between Medicaid and other insurers' payment levels are still quite large.

Medicaid fees are about 47 percent of private sector fees, even though the gap between them appears to have narrowed slightly between 1990 and 1993. This occurred because private sector fees grew slightly more slowly than Medicaid fees (3.5 percent versus 4.8 percent per year).[2]

Overall, Medicaid fees are about 73 percent of Medicare's.[3] While Medicaid fees for deliveries are nearly at Medicare levels (97 percent), Medicaid fees for other groups of services (office visits, consultations, psychological services, emergency room visits, and surgeries) range from 55 percent to 78 percent of Medicare levels.

Medicaid fees were closer to Medicare levels in 1993 than in 1989 (73 percent versus 62 percent). Some of this change may reflect a slightly different methodology for calculating the fee index. Most, however, reflects a nearly flat growth rate for Medicare fees and some states' deliberate policy decisions to raise their Medicaid fees.

The ratio of Medicaid fees relative to Medicare payments varies by state. An index compares Medicaid and Medicare fees levels for a bundle of services (Table 18-1).[4] As a percentage of Medicare payments, Medicaid fees are highest in Alaska, Arizona, Arkansas, Georgia, South Dakota, and Wyoming. They are lowest in New Jersey, New York, and Rhode Island. Further, the ratio of Medicaid to Medicare physician fee levels varies by type of service.

[2] For a discussion of the growth in private sector fees, see Chapter 19.

[3] Ideally, the comparison should be made between actual Medicaid and Medicare payments. Comparisons presented in this chapter slightly overstate Medicaid levels for two reasons. Medicaid fee levels are higher than actual Medicaid payments since some bills may be below the maximum payment. Additionally, average Medicare payments are slightly lower than actual payments because they do not include bonus payments for services provided in Health Professional Shortage Areas.

[4] Fees were grouped into nine service types: office visits, hospital visits, emergency room visits, consultations, X-ray services, electrocardiograms, psychiatric services, obstetrical services, and surgical and other procedures. Fees for each service type were then combined in proportion to their Medicaid utilization at the national level to create a typical Medicaid fee for each state. The index value is each state's typical fee divided by the nationwide average.

Table 18-1. Medicaid Fees as a Percentage of Medicare Payments, by State, 1993

State	Medicaid as Percentage of Medicare	State	Medicaid as Percentage of Medicare
Alabama	76 to 86	Montana	95
Alaska	174 to 220	Nebraska	95
Arizona	112	Nevada	96
Arkansas	119	New Hampshire	84
California	63	New Jersey	36 to 38
Colorado	71	New Mexico	82 to 83
Connecticut	74	New York	31
Delaware	76	North Carolina	98
District of Columbia	64	North Dakota	85
Florida	78	Ohio	61
Georgia	113	Oklahoma	79
Hawaii	85	Oregon	76
Idaho	91	Pennsylvania	57
Illinois	66 to 73	Rhode Island	42
Indiana	99 to 101	South Carolina	75
Iowa	82 to 86	South Dakota	111
Kansas	67	Tennessee	93
Kentucky	100 to 108	Texas	92
Louisiana	85	Utah	82
Maine	58	Vermont	68
Maryland	55	Virginia	90 to 92
Massachusetts	87	Washington	76 to 83
Michigan	69	West Virginia	98
Minnesota	105 to 127	Wisconsin	77 to104
Mississippi	81	Wyoming	121
Missouri	49 to 55		

SOURCE: Physician Payment Review Commission analysis of an Intergovernmental Health Policy Project survey of Medicaid programs, 1993 and 5 percent Medicare claims data, January-September, 1993.

Changes in Medicaid Fees. A comparison of fees in 1990 and 1993 shows a mixed picture concerning changes (Table 18-2).[5] Fees in California, Indiana, Massachusetts, Oregon, and South Carolina declined slightly or remained the same between 1990 and 1993. Fees in eight states increased substantially, by 30 percent or more over this period. West Virginia dramatically increased its fees over this three-year period, moving them to above average from being among the nation's lowest. Overall, Medicaid programs increased fees by about 15 percent from 1990 to 1993.

Variation in Medicaid Fees. Variations in Medicaid physician fees across states are important to policymakers because they may lead to differences in access to care for beneficiaries. Broad state discretion in setting physician fees has resulted in wide variations in fee levels. Analysis of the Commission's previous survey of Medicaid fees indicated large

[5] The source of 1990 Medicaid fees is a survey conducted for HCFA by John Holahan (1991). The percentage change is calculated for eight groups of services. Where it was possible, 1991 procedure codes were crosswalked to 1993 codes. Those codes that could not be matched were dropped from the analysis. Due to coding changes, emergency room visits were excluded entirely from the analysis.

Table 18-2. Change in Medicaid Fees, by State, 1990-1993

State	Percent Change	State	Percent Change
Alabama	10 to 26	Montana	39
Alaska	36 to 56	Nebraska	14
Arkansas	23	Nevada	5
California	-2	New Hampshire	48
Colorado	7	New Jersey	4 to 13
Connecticut	35	New Mexico	13 to 16
Delaware	17	New York	19
District of Columbia	8	North Carolina	27
Florida	10	North Dakota	11
Georgia	3	Ohio	10
Hawaii	7	Oklahoma	3
Idaho	16	Oregon	0
Illinois	1 to 14	Pennsylvania	19
Indiana	-2 to -4	Rhode Island	*
Iowa	4 to 8	South Carolina	-6
Kansas	21	South Dakota	22
Kentucky	44 to 62	Tennessee	18
Louisiana	10	Texas	10
Maine	3	Utah	12
Maryland	16	Vermont	12
Massachusetts	-2	Virginia	6 to 11
Michigan	11	Washington	33 to 44
Minnesota	24 to 47	West Virginia	180
Mississippi	58	Wisconsin	28 to 60
Missouri	26 to 42	Wyoming	26

SOURCE: Physician Payment Review Commission analysis of an Intergovernmental Health Policy Project survey of Medicaid programs, 1993 and Holahan, 1991.

* Not available.

(from 3-fold to 15-fold) differences between the highest and lowest Medicaid fees for 20 services (PPRC 1991).

The most recent survey conducted for the Commission indicates that even larger differences (from 4-fold to 39-fold) between the highest and lowest Medicaid physician fees in 1993 (for selected fees, see Table 18-3). A significant portion of the variation is due to considerably higher fees in Alaska. Excluding Alaska, the range of fees across states is reduced, but still is large (from 3-fold to 16-fold differences).

As the Commission found previously, payments for maternity services vary the least. The narrower range for these services may reflect federal and state policymakers' efforts to increase Medicaid beneficiaries' access to obstetrical care by broadening eligibility rules for low-income pregnant women and raising fees for such services. It may also reflect the use of more consistent global service payment policies by states.[6]

[6] A global service is a group of clinically related services treated as a unit for purposes of billing, coding, or payment.

Table 18-3. Distribution of Medicaid Fees, by Service, 1993 (dollars)

Code	Description	Minimum	Median	Maximum
99203	Office visit, new patient, level 3	$11	$36	$135
99213	Office visit, established patient, level 3	11	24	70
99223	Initial hospital care, level 3	10	64	255
99232	Subsequent hospital care, level 2	6	29	130
99431	Newborn examination	10	59	236
99283	Emergency visit, level 3	7	33	162
99244	Office consultation, level 4	24	74	270
99254	Inpatient consultation, level 4	20	72	297
99391	Well-baby visit	10	27	71
90844	Psychotherapy/45-50 minutes	15	53	120
92004	Ophthalmological visit, new patient	17	40	100
93000	Electrocardiogram	13	25	81
99291	Critical care	25	86	409
42820	Tonsillectomy	60	200	655
44950	Appendectomy	160	382	1392
49500	Inguinal hernia repair	140	349	1529
58150	Total hysterectomy	240	698	3028
59400	Total obstetrical care/vaginal delivery	468	1051	1890
59410	Vaginal delivery only	320	700	1440
59510	Total obstetrical care/cesarean delivery	598	1200	2310
59515	Cesarean delivery only	425	844	2402
66984	Cataract removal	440	990	3975
70450	CAT scan, head	68	244	476
71010	Chest X-ray, single view	10	20	65
76091	Mammography, bilateral	30	54	124
76700	Echography, abdominal	40	90	232

SOURCE: Physician Payment Review Commission analysis of an Intergovernmental Health Policy Project survey of state Medicaid programs, 1993.

The Medicaid fees for four services—level 3 office visit (new patient), total hysterectomy, CAT scan (head), and total obstetrical care (vaginal delivery)—provide a snapshot of the variation in fee levels across states (Tables 18-4 through 18-7). Without Alaska, fees for office visits range from $11 in New York to $63 in Washington. Those for total obstetrical care (vaginal delivery) range from $468 in New Jersey to $1,890 in Connecticut. Again omitting Alaska, those for total hysterectomies range from $240 in New York to $1,400 in Virginia and Kentucky. Those for CAT scans of the head range from $68 in Maine to $476 in Nebraska.

To provide a more comprehensive gauge of the differences in physician fee levels across states, an index that measures relative Medicaid fee levels for a bundle of services was developed (Table 18-8). Medicaid fees in Alaska, Arizona, Arkansas, Nevada, and Wyoming

Table 18-4. Medicaid Fees and Average Medicare Payments for Office Visit, New Patient (Level 3), by State, 1993

State	Medicaid	Medicare	Medicaid as Percentage of Medicare
Alabama	$24.75 to 2.18	$45.26 55 to	71
Alaska	90.00 to 135.00	63.68 141 to	211
Arizona	57.42	54.80	105
Arkansas	59.00	48.62	121
California	46.00	59.31	78
Colorado	35.00	47.46	74
Connecticut	26.00 to 45.00	56.06	46 to 80
Delaware	34.00	42.69	80
District of Columbia	30.00	48.38	62
Florida	35.00	52.76	66
Georgia	51.24	47.49	108
Hawaii	60.70	60.18	101
Idaho	44.57	45.07	99
Illinois	25.05 to 29.76	48.76	51 to 61
Indian	33.21	41.27	80
Iowa	29.23 to 33.47	45.57	64 to 73
Kansas	25.00	43.95	57
Kentucky	39.00	45.36	86
Louisiana	36.00	48.07	75
Maine	24.77	45.78	54
Maryland	37.00	47.25	78
Massachusetts	41.00	49.96	82
Michigan	35.89	47.52	76
Minnesota	35.20 to 51.20	47.27	74 to 108
Mississippi	28.48	36.44	78
Missouri	20.00 to 40.00	45.89	44 to 87
Montana	42.33	48.60	87
Nebraska	39.34	37.21	106
Nevada	47.46	57.77	82
New Hampshire	36.00	45.46	79
New Jersey	17.00 to 22.00	51.34	33 to 43
New Mexico	36.02	48.77	74
New York	11.00	52.29	21
North Carolina	47.01	47.83	98
North Dakota	41.00	45.82	89
Ohio	31.21	46.68	67
Oklahoma	34.97	46.94	74
Oregon	40.93	52.62	78
Pennsylvania	20.00 to 25.00	43.42	46 to 58
Rhode Island	18.00	46.06	39
South Carolina	30.00	41.51	72
South Dakota	44.00	41.94	105
Tennessee	40.00	46.60	86
Texas	47.57	46.41	102
Utah	36.85	43.16	85
Vermont	27.00	48.85	55
Virginia	27.00	39.14	69
Washington	43.13 to 63.14	52.74	82 to 120
West Virginia	36.75	45.94	80
Wisconsin	24.37 to 43.35	44.56	55 to 81
Wyoming	50.98	46.48	110

SOURCE: Physician Payment Review Commission analysis of an Intergovernmental Health Policy Project survey of state Medicaid programs, 1993 and 5 percent Medicare claims data, January-September, 1993.

Table 18-5. Medicaid Fees and Average Medicare Payments for Total Obstetrical Care (Vaginal Delivery), by State, 1993

State	Medicaid	Medicare	Medicaid as a Percentage of Medicare
Alabama	$1,300.00 to1,700.00	$1,096.73	119 to 155
Alaska	*	*	*
Arizona	1,520.00	1,246.75	122
Arkansas	940.00	1,044.02	90
California	961.20	1,309.71	73
Colorado	961.78	1,156.24	83
Connecticut	1,890.00	1,241.35	152
Delaware	*	*	*
District of Columbia	1,500.00	1,296.14	116
Florida	*	*	*
Georgia	1,205.00	1,106.61	109
Hawaii	588.80	1,231.92	48
Idaho	1,074.27	1,115.26	96
Illinois	*	*	*
Indiana	769.20	1,110.11	69
Iowa	1,064.00	1,102.98	96
Kansas	1,400.00	1,102.33	127
Kentucky	*	*	*
Louisiana	*	*	*
Maine	909.00	1,098.87	83
Maryland	*	*	*
Massachusetts	1,316.00	1,226.69	107
Michigan	*	*	*
Minnesota	953.81 to1,096.88	1,156.72	82 to 95
Mississippi	*	*	*
Missouri	1,075.00	1,141.54	94
Montana	1,170.45	1,108.65	106
Nebraska	844.00	1,065.38	79
Nevada	1,100.03	1,251.23	88
New Hampshire	1,200.00	1,138.27	105
New Jersey	468.00 to 867.00	1,270.22	37 to 68
New Mexico	937.14 to1,063.53	1,120.68	84 to 95
New York	1,037.00	1,307.40	79
North Carolina	1,160.50	1,067.67	109
North Dakota	*	*	*
Ohio	*	*	*
Oklahoma	1,000.00	1,089.29	92
Oregon	926.79	1,171.50	79
Rhode Island	750.00	1,170.83	64
South Carolina	*	*	*
South Dakota	682.00	1,063.17	64
Tennessee	1,100.00	1,075.21	102
Texas	*	*	*
Utah	849.00	1,138.80	75
Vermont	945.00	1,087.50	87
Virginia	1,200.00	1,138.57	105
Washington	1,650.09	1,197.66	138
West Virginia	*	*	*
Wisconsin	944.34 to1,416.50	1,125.32	84 to 126
Wyoming	1,260.00	1,122.27	112

SOURCE: Intergovernmental Health Policy Project and Physician Payment Review Commission, 1993.

* Not available.

NOTE: Since there are few Medicare deliveries, Medicare payments are estimated by multiplying relative value units adjusted by the geographic practice cost index times the 1993 surgical conversion factor.

Table 18-6. Medicaid Fees and Average Medicare Payments for Total Hysterectomy, by State, 1993

State	Medicaid	Medicare	Medicaid as a Percentage of Medicare
Alabama	$744.78	$719.65	103
Alaska	2,500.00 to 3,028.00	888.20	281 to 341
Arizona	916.47	806.15	114
Arkansas	912.00	697.35	131
California	733.76	859.03	85
Colorado	568.31	769.26	74
Connecticut	828.00	862.54	96
Delaware	648.83	792.86	82
District of Columbia	675.00	873.87	77
Florida	663.00	764.88	87
Georgia	786.42	716.20	110
Hawaii	837.47	818.51	102
Idaho	803.07	741.06	108
Illinois	715.40	805.82	89
Indiana	946.70 to 1,074.00	729.92	130 to 147
Iowa	848.42	708.43	120
Kansas	500.00	755.69	66
Kentucky	1,050.00 to 1,400.00	733.87	143 to 191
Louisiana	724.42	771.05	94
Maine	338.40	446.53	76
Maryland	356.00	837.56	43
Massachusetts	787.00	815.17	97
Michigan	536.60	801.49	67
Minnesota	1,016.25	752.76	135
Mississippi	516.61	726.29	71
Missouri	360.00	769.88	47
Montana	636.31	750.60	85
Nebraska	689.52	714.87	96
Nevada	1161.60	704.01	165
New Hampshire	770.00	767.23	100
New Jersey	332.00	850.10	39
New Mexico	748.94	734.26	102
New York	240.00	911.80	26
North Carolina	665.34	690.71	96
North Dakota	621.75	701.09	89
Ohio	543.53	772.95	70
Oklahoma	548.43	716.71	77
Oregon	724.14	782.18	93
Pennsylvania	518.52	814.15	64
Rhode Island	420.00	786.60	53
South Carolina	663.00	710.44	93
South Dakota	1,008.00	691.31	146
Tennessee	765.68	711.86	108
Texas	697.89	730.15	96
Utah	555.02	771.24	72
Vermont	374.00	677.17	55
Virginia	1,100.00 to 1,400.00	669.23	164 to 209
Washington	532.94	806.94	66
West Virginia	1,141.87	750.70	152
Wisconsin	771.66	728.00	106
Wyoming	1,071.00	758.06	141

Source: Physician Payment Review Commission analysis of an Intergovernmental Health Policy Project survey of state Medicaid programs, 1993 and 5 percent Medicare claims data, January-September, 1993.

Table 18-7. Medicaid Fees and Average Medicare Payments for CAT Scan (Head), by State, 1993

State	Medicaid	Medicare	Medicaid as a Percentage of Medicare
Alabama	$171.90	$260.92	66
Alaska	193.00	355.53	54
Arizona	297.09	289.94	102
Arkansas	387.00	238.48	162
California	197.43	315.14	63
Colorado	241.78	268.69	90
Connecticut	174.84	311.65	56
Delaware	237.90	286.67	83
District of Columbia	262.31	324.45	81
Florida	245.50	287.24	85
Georgia	290.95	269.35	108
Hawaii	313.44	313.44	100
Idaho	266.80	272.79	98
Illinois	277.45	300.74	92
Indiana	308.00	254.19	121
Iowa	281.75	250.83	112
Kansas	345.00	275.40	125
Kentucky	288.62 to 384.82	248.48	116 to155
Louisiana	292.83	245.21	119
Maine	67.50	271.63	25
Maryland	201.50	308.57	65
Massachusetts	196.00	316.43	62
Michigan	195.36	302.20	65
Minnesota	364.50	274.93	133
Mississippi	260.84	254.53	102
Missouri	227.00	272.20	83
Montana	77.99	259.82	30
Nebraska	475.89	288.48	165
Nevada	345.97	318.24	109
New Hampshire	200.00	285.36	70
New Jersey	125.00	318.33	39
New Mexico	288.25	263.50	109
New York	217.00	324.93	67
North Carolina	244.44	251.62	97
North Dakota	227.00	249.17	91
Ohio	297.02	284.15	105
Oklahoma	199.76	238.45	84
Oregon	361.13	274.28	132
Pennsylvania	*	*	*
Rhode Island	*	*	*
South Carolina	153.85	239.08	64
South Dakota	276.00	240.96	115
Tennessee	93.50	263.91	35
Texas	257.44	258.03	100
Utah	202.75	270.48	75
Vermont	*	*	*
Virginia	157.50	257.56	61
Washington	202.34	259.51	78
West Virginia	310.42	287.41	108
Wisconsin	366.63	256.80	143
Wyoming	*	*	*

SOURCE: Physician Payment Review Commission analysis of an Intergovernmental Health Policy Project survey of state Medicaid programs, 1993 and 5 percent Medicare claims data, January-September, 1993.

* Not available.

Table 18-8. Index of Relative Medicaid Fees, by State, 1993

State	Index	State	Index
Alabama	.87 to .97	Montana	1.02
Alaska	2.31 to 2.79	Nebraska	.96
Arizona	1.44	Nevada	1.25
Arkansas	1.25	New Hampshire	.93
California	.81	New Jersey	.47 to .48
Colorado	.81	New Mexico	.90 to .94
Connecticut	1.02	New York	.49
Delaware	.86	North Carolina	.96
District of Columbia	.80	North Dakota	.88
Florida	.93	Ohio	.71
Georgia	1.17	Oklahoma	.82
Hawaii	1.10	Oregon	.86
Idaho	1.05	Pennsylvania	.70
Illinois	.76 to .87	Rhode Island	.49
Indiana	1.09 to 1.14	South Carolina	.74
Iowa	.93 to .95	South Dakota	1.08
Kansas	.78	Tennessee	.93
Kentucky	1.05 to 1.17	Texas	1.00
Louisiana	.98	Utah	.88
Maine	.57	Vermont	.71
Maryland	.74	Virginia	1.04 to 1.10
Massachusetts	.92	Washington	.86 to 1.03
Michigan	.79	West Virginia	1.10
Minnesota	1.16 to 1.39	Wisconsin	.88 to 1.08
Mississippi	.79	Wyoming	1.27
Missouri	.58 to .66		

SOURCE: Physician Payment Review Commission analysis of an Intergovernmental Health Policy Project survey of Medicaid programs, 1993.

NOTE: The index measures each state's Medicaid fee level relative to the average for all states. For example, Georgia's Medicaid fees are about 117 percent of average Medicaid fees for all states.

are at least 125 percent of the average. Fee levels in New Jersey, New York, and Rhode Island are about half the average level.

There are three possible explanations for variations in states' fee levels. First, differences in cost of practice explain a portion of the variation. Deflating fees for these differences reduces the variance somewhat, indicating that practice costs are responsible for some of the differences.

Second, inclusiveness of the global surgical package (including the length of the preoperative and postoperative period) could contribute to differences in prices for those services, but it appears to explain very little of the observed variation in fees. For example, Texas and New Jersey have similar postoperative periods for total hysterectomies (42 and 45 days, respectively), yet the fee in Texas is about twice that paid in New Jersey. Additionally, since

global packages apply only to surgical services, they cannot explain variations in fees for other services.

Finally, much of the variation may reflect deliberate policy decisions of states. Among these are trade-offs between payment levels for various services, the number of optional services covered, and breadth of eligibility.

MONITORING ACCESS TO CARE

In view of existing barriers to care for Medicaid beneficiaries, it is important to monitor access. To accomplish this, the Commission recommends conducting a periodic survey of Medicaid beneficiaries in all states. Through such a survey, HCFA would have a meaningful tool to judge whether states are complying with the OBRA89 access provisions, thereby ensuring that the access of Medicaid beneficiaries is comparable to that of the general population.

The survey would probably cost between $6 million and $12 million. The cost would depend on the final survey design. Interviews by telephone and in person with between 30,000 and 45,000 beneficiaries would be needed. Access to care for Medicaid populations in each state would be compared with access for those with private insurance, as measured by a national survey such as the National Health Interview Survey (NHIS).[7]

As the Commission previously noted, data development is the first step in monitoring access for Medicaid beneficiaries (PPRC 1993). To take that first step, the Commission in 1993 recommended that HCFA develop a national Medicaid claims and eligibility data system for monitoring access and other aspects of the program.

If such a data system were fully developed, the usefulness of claims data for measuring access would still be limited in two ways. First, judging the adequacy of access requires comparisons with another population group. There is now no readily available claims file from the privately insured population for such comparisons, however.[8]

Second, even when data on comparable groups are available, the lack of health status information makes it difficult to adjust utilization for differences in personal health needs. This is particularly important for Medicaid monitoring, because the overall health status of the Medicaid population is poorer than that of the general population (HCFA 1986; Nelson et al. 1994).

[7] A sample size of 30,500 would allow 530 observations per state plus 4,000 additional observations in the largest states. Given design effects such those due to clustering, this would allow a 95 percent confidence interval of plus or minus 5 percentage points. Adding an additional 4,000 respondents from the eight largest states would improve the ability to analyze results.

[8] See Chapter 16 for a discussion of data systems.

The critical importance of health status becomes apparent when one compares utilization with and without adjusting for health status. National survey results show Medicaid beneficiaries use more services than the non-Medicaid population. But research has also shown that with adjustments for health status, use of services by the poor and nonpoor are comparable (Newacheck 1988).

Despite the importance of health status as an intervening variable, health status is difficult to measure with claims data. Health status is multidimensional, encompassing physical and functional health, as well as mental health. Measures of physical health ought to include a list of self-reported health problems or medical diagnoses. These measures can be obtained only from surveys or medical records.

Given the limitations of claims data, the Commission decided to explore the possibility of developing a Medicaid survey or a Medicaid supplement to a national survey that could be used to measure access. Under a contract with the Commission, the Center for Health Policy Studies at Georgetown University School of Medicine and Mathematica Policy Research have developed such a survey and conducted a pilot test of it.[9]

In developing the survey, the Commission specified three goals. First, appropriate measures must provide timely, state-specific estimates of access to care for Medicaid beneficiaries. Second, measures should be suitable for making comparisons across states and with existing national data for other populations. Third, measures should emphasize primary, preventive, and prenatal care for noninstitutionalized beneficiaries who are not dually eligible for Medicare.[10]

Current Surveys. The Commission began exploring the potential of using survey data to monitor access to care under Medicaid by first evaluating current national surveys, like the National Medical Expenditure Survey (NMES) and NHIS, as instruments (Gold et al. 1993). Although these surveys answer some questions about beneficiary access in the nation, they cannot furnish state-specific estimates of Medicaid access. None of the surveys reviewed has a large enough sample to provide aggregate estimates for all states. The NHIS, the largest survey evaluated in this study, would produce an effective national sample size of 7,000 to 8,000 Medicaid beneficiaries.[11] At best, it is expected that NHIS would have effective Medicaid samples of about 900 in California, 600 in Texas, 500 in New York, and 300 to 350 in 15 or so other states.[12] Thus, the NHIS could not be used to produce estimates for most states.

[9] Jack Hadley and Marsha Gold are co-directors of this project.

[10] The access experience of Medicare beneficiaries is measured through the Medicare Current Beneficiary Survey. Analyses of the Medicare Current Beneficiary Survey are reported in Chapter 17.

[11] The effective sample size is the number of observations from a simple random sample that would produce the same standard error as the complex sample.

[12] In addition to the problems of sample size, there is a danger that primary sampling units might not be representative of the state (e.g., an urban primary sampling unit in a rural state).

Pilot Survey

The following section describes lessons learned from the Commission's development and implementation of a pilot survey in one state.

Questionnaire. Questionnaire design began by including items from existing national surveys, such as the National Health Interview Survey, and, continued by developing additional items where necessary.[13] The questionnaire developed for the Commission's pilot survey took about 30 minutes for respondents to answer. Besides family sociodemographic information, the survey instrument asked for the following information about one adult and one child in each surveyed family unit:

- history of Medicaid coverage;
- usual source of care (including site, travel time, and waiting time);
- delays in obtaining care and barriers to access;
- preventive health care (e.g., cholesterol test, Pap smear for adults, and immunizations for children);
- physician and hospital utilization for acute care;
- satisfaction with care;
- health status; and
- other health insurance coverage.

The pilot test found that the questions generally were clear and covered most dimensions of access (Eisenhower et al. 1993a).

Sampling. The project also tested two methods to select a sample: screening the population through random-digit dialing, disproportionately sampling in low-income areas; and using the state's Medicaid eligibility list. Random digit dialing yielded an unexpectedly low number of Medicaid beneficiaries. By contrast, in a study for the Robert Wood Johnson Foundation's Initiatives in Health Care Financing Reform random-digit dialing was used more effectively to locate Medicaid beneficiaries, who were one of the target groups in this 10-state household survey. In nine of those states, random-digit dialing was used to supplement Medicaid files

[13] There were two reasons for using questions from existing surveys. First, these questions have been extensively tested. Second, their use provides a basis for making comparisons of access for Medicaid beneficiaries and the general population.

for sampling; in one state, it was used as the sole source for a sample (Eisenhower et al. 1993b).

Experience with the sample for this survey drawn from Medicaid files was more successful, but revealed another major problem; namely, that the state Medicaid list did not have usable telephone numbers for a large percentage of beneficiaries (Eisenhower et al. 1993b).

If a Medicaid access survey were conducted in every state, sampling methods would have to accommodate differences in eligibility files.[14] While all states have automated eligibility files, at least 12 have information stored in multiple systems. For example, Texas has two eligibility files (one for people receiving Supplemental Security Income, and another for those receiving Aid to Families with Dependent Children and for covered pregnant women). In general, it seems possible to use eligibility files to sample either individuals or cases (which may include several family members), although sampling individuals is easier. All states except Nebraska have mailing addresses in their eligibility files, but only six require the actual residence address. Although telephone numbers are available in eligibility files of 22 states and in separate systems of four others, many individual records are missing or incorrect (Chu 1993).

Pilot Test. The pilot test, which was completed between August and October of 1993, provides some valuable lessons. First, while a significant portion of the sample could not be contacted, most of those who were contacted agreed to be interviewed. Given the large number of unusable telephone numbers, a mixed mode of implementation (telephone and in-person interviews) is necessary to obtain an acceptable response rate. Second, the low nonresponse rate for questions suggests that the instrument was well designed. Third, although the $20 incentive for participation did not increase the number of people who responded, it reduced the number of telephone calls need to contact respondents (Eisenhower et al. 1993b).

Comparative Data. To judge whether access for Medicaid beneficiaries is adequate, it must be compared with that of other populations. Since the Congress has previously applied a standard of comparable access for beneficiaries and the general population, the pilot project used that standard as well. Analyzing the National Health Interview Survey and the National Maternal and Infant Health Survey, researchers found that comparisons were possible at the national level (Nelson et al. 1994). Findings from such comparisons could be used to encourage those states with the greatest barriers to improve access.

[14] This information is based on a survey of 46 states. Three states did not respond to the survey, and a fourth was excluded because it was the pilot test state (Chu 1993).

Comparisons of individual state Medicaid data with national data fail to recognize possible unique local differences in access to care that affect both the Medicaid and general populations. If it is decided that the appropriate comparison is between a state's Medicaid beneficiaries and its general population, the survey sample size would have to be far larger than is now contemplated.[15]

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CHAPTER 19

PHYSICIANS AND MEDICARE PAYMENT POLICY

The resource-based Medicare Fee Schedule, implemented in 1992, was designed to remove many of the inequities of the previous payment system by shifting payment away from tests and procedures toward evaluation and management (EM) services. In 1993 the Commission examined the fee schedule's initial financial impact and found that payment for EM services and the specialties providing them were being reallocated, as intended (PPRC 1993).

With another year's experience, successes of Medicare's payment reform are becoming apparent. The redistribution of payment toward EM services continues, use of the new EM codes has improved, and patterns of coding have remained stable. On the other hand, the gap between Medicare payments and those of private insurers is widening, potentially leading to reduced access for Medicare beneficiaries.

In response to the Commission's 1993 survey, however, physicians continued to express a poor understanding of Medicare's payment reform and discontent with the payment rates.[1] Low payment levels were physicians' key concern with the Medicare Fee Schedule and were considered a serious problem with Medicare in general.

RECOMMENDATION

Although the growing disparity between Medicare and private payment rates has not yet caused measurable reductions in access, further divergence in those rates would increase the risk of adverse effects on access. The Congress should be cautious about policies that will further widen the gap through additional constraints on Medicare payment rates.

This chapter begins by evaluating the effect of the Medicare Fee Schedule on physicians. In particular, it describes physicians' use of the new EM codes, and analyzes the financial impact on physicians by showing the redistribution of both payment rates and payments by specialty. The chapter then examines the decline in Medicare rates relative to those of private insurers.

[1] See Chapter 17 for a description of the Commission's survey of physicians.

PHYSICIANS AND THE MEDICARE FEE SCHEDULE

The Medicare Fee Schedule was introduced in conjunction with a number of important changes in the payment system. Among these were revision of coding for EM services, tightening of balance billing limits, standardizing global surgical service packages, and reducing payment for certain office-based procedures performed in a hospital outpatient department.

Two types of analyses were used to evaluate the impact of the Medicare Fee Schedule on physicians. First, the Commission's 1993 survey asked physicians about their understanding of the Medicare Fee Schedule and their problems with it. Then, analyses of Medicare claims examined physicians' coding of EM services and the redistribution of payment toward these services.

Physicians' Understanding and Problems with the Medicare Fee Schedule

Physicians' understanding about the Medicare Fee Schedule after the first six months of implementation was unchanged a year later. In the Commission's 1993 physician survey, 64 percent of surgeons said they knew which services are included in the global surgical package, while only 53 percent of physicians who bill patients above the fee schedule amount understood the balance billing limits. Surprisingly, only 65 percent of physicians thought they adequately understood how to use the new billing codes for visits and consultations. These results are similar to those of the Commission's 1992 survey. Physicians' understanding of the Volume Performance Standard (VPS) system increased, however, to 29 percent in 1993 from 18 percent in 1992.

Discontent with the Medicare Fee Schedule persisted. When asked to identify two of their most important problems with the Medicare Fee Schedule, physicians most often cited low payment levels along with paperwork and other administrative burdens (Table 19-1). Although the same issues were important to physicians, their relative importance had changed. Low payment levels, the most-frequently cited complaint in both years, concerned 48 percent in 1993 compared to 37 percent in 1992. Increased paperwork or slow reimbursement was a concern to 39 percent in 1993, up from only 15 percent in 1992. Physicians were less concerned about coding in general, and about EM services in particular. Only 3 percent were troubled by the coding of EM services compared with 14 percent in 1992.

Data and Methodology of Medicare Claims Analyses

The Commission relied on information from Medicare claims for its analyses of coding and redistribution of payment. The Health Care Financing Administration (HCFA), in 1991, made major changes to streamline its claims processing system, introducing the National Claims History (NCH) files. Because these files compile all Medicare claims from all providers, they

Table 19-1. Physicians' Most-Frequently Cited Problems with the Medicare Fee Schedule, 1993 and 1994 (percentage)

Payment Levels	
Low payment levels for most services/low conversion factor	48
Inadequate reimbursement for cognitive skills	8
Low payment levels for selected services	7
Balance billing limits	5
Inadequate reimbursement for practice expenses	2
Other payment issues*	11
Coding	
Problems with evaluation and management codes	3
Problem with billing codes other than evaluation and management	7
Other	
Increased paperwork or slow reimbursement	39
Global packages for services	2
Carrier performance	1

SOURCE: National Opinion Research Center 1994.

* These include problems with the geographic adjustments, differential payment by site of service, and no specialty differential.

NOTE: Percentages sum to more than 100 because physicians could name two problems.

are too large for analytic purposes. HCFA, therefore, has made sample files. One set, called the Standard Analytic Files (SAF), contains all Medicare claims for a 5 percent sample of beneficiaries. Another captures all Medicare claims for a 5 percent sample of physicians. Both types of files were used.

Analyses of a Sample of Medicare Beneficiaries. Using 1991, 1992, and 1993 claims for a 5 percent sample of beneficiaries, the Commission analyzed the impact of the Medicare Fee Schedule on physicians. Because claims were available only for the first six months of 1993, half-year files were constructed for all three years. Each file contains claims incurred from January through June and paid through September of that year. Analyses of the time lapse between when physicians submit claims and when carriers pay them suggest that these files are comparable.

As with the Commission's previous analyses of changes in payments and quantity of services, year-to-year changes in prices and quantity of services were calculated for each specialty within each Medicare carrier area. The quantity index captures changes in the total number of services and in the mix of services. The index is constructed by weighting counts of services by the payment rate for the service. For example, a $1,000 cataract surgery would be weighted the same as 10 consultations costing $100 a piece.

Analysis of changes in EM services between 1991 and 1992 is particularly difficult. Adoption of the new EM codes led to a complete revision of coding for visits and consultations, both within a class of visits and across classes. For some classes, such as subsequent hospital care, the number of levels used to describe a visit was reduced. Other classes, such as subsequent critical care visits, were eliminated entirely. Initial consultations were divided into two classes based on the site of service.

To translate the old EM codes into the new ones, HCFA developed a crosswalk. Commission analyses use this crosswalk in order to match 1991 EM codes with those for 1992. Limitations of this crosswalk, however, may result in inaccuracies in the measured changes in prices and quantity of visits.

Analyses of a Sample of Physicians. HCFA has also developed a file based on Medicare claims for a 5 percent sample of physicians that resembles one of the files in the Part B Medicare Annual Data (BMAD) series. An improved sampling technique randomly selects physicians using the last digit of their unique physician identification number (UPIN).[2] The availability of this file permitted the Commission to analyze changes in coding and Medicare revenue for individual physicians.

Carriers' assignment of the new UPIN to claims was incomplete. Consequently, some carriers were unable to capture all the Medicare claims for physicians in the 5 percent sample. The Commission's analyses, therefore, use claims from the 18 carriers that showed completion rates of 90 percent or better in both 1991 and 1992.

Use of the New EM Codes

The new EM codes adopted for the Medicare Fee Schedule, which were developed by the American Medical Association's Current Procedural Terminology (CPT) Editorial Panel, maintained the existing classes of visits, such as initial hospital care or established patient office visits. Within each class, up to five levels were newly defined based on the extent of history obtained, examination performed, and complexity of the medical decisionmaking. The length of time spent with the patient and the nature of the presenting problem were also included in the definitions to distinguish some levels.

Revisions to the EM codes were made so that they would be more accurate and easier to use. In addition, carriers were instructed to interpret the codes more uniformly, and physicians were taught how to use the new codes.

To evaluate the use of the new EM codes, the Commission examined three aspects of coding: uniformity across carriers, improved use by physicians, and stability of coding patterns over

[2] Previous samples of physicians used identifiers for physician practices so that an identifier sometimes represented several physicians. This is no longer the case with the UPIN, which always represents a single physician, including those with more than one practice setting.

time. Previous analyses suggest a reduction in coding variation across carriers within the first six months of the new system. This year, the Commission analyzed individual physicians' coding patterns and trends in these patterns over time.

Before the new EM codes became effective, individual physicians tended to use only one or two levels within a class of visits to describe their entire Medicare caseload. That is, some described all established patient office visits as intermediate-level visits. Because one would expect more variation across a physician's case load, this suggested that physicians were not using the codes correctly.

A comparison of the number of levels used within a visit class found that physicians used more codes under the new scheme than in 1991 (Table 19-2).[3] For all visit classes, fewer physicians used only one level and more used the maximum number available in 1992 than in 1991. The largest increase in physicians using all levels was for initial and subsequent hospital care. Most remarkably, while only 24 percent of the physicians used all the levels for initial hospital care in 1991, about 50 percent did so in 1992.

Unstable patterns of coding over time might connote inappropriate or inaccurate use of the new EM codes. Whereas initial fluctuations in physicians' coding of EM services might reflect a learning curve in using the new codes, continued fluctuations might indicate larger problems. Moreover, trends toward coding EM services at higher levels might suggest upcoding; that is, coding at higher levels than warranted for the service provided.

For all EM codes, coding patterns were stable during the first 18 months under the Medicare Fee Schedule (Table 19-3). Analyses of the first six quarters under the Medicare Fee Schedule used the average level coded within a visit class, measured in dollars, to determine changes in patterns of coding. If physicians coded higher levels of visits over time, this average price would increase. Most visit classes showed no discernible pattern of changes in average price, suggesting that upcoding did not occur. The average price for initial hospital care and initial patient consultations rose only slightly over time.

Although looking at total changes in average price may mask upward or downward trends for some specialties, analyses showed this was not the case. These analyses are not presented. Trends for each specialty reflected the overall trend.

Financial Impact of the Medicare Fee Schedule

The Medicare Fee Schedule was intended to redistribute payment across both services and localities. In general, fee levels increased for EM services and for services delivered in rural

[3] Because the new coding scheme changed the number of levels for some classes, a comparison of the number of codes used was not possible. Thus, the analysis looked at the percentage of physicians who used only one level in a class and those who used all levels in the class.

Table 19-2. Levels of Service Physicians Used for Coding Evaluation and Management Services, 1991 and 1992 (percentage)

Visit Class	Used Only One Level of Service		Used All Levels of Service	
	1991	1992	1991	1992
Office Visits				
New patient	18.1	4.9	6.6	15.8
Established patient	3.9	1.6	17.2	42.2
Hospital Care				
Initial care	35.0	12.8	23.8	51.6
Subsequent care	20.7	12.8	8.9	62.1
Consultations[a]				
Initial visit (1991)	19.7	[b]	8.6	[b]
Follow-up visit (1991)	22.7	[b]	19.4	[b]
Outpatient (1992)	[b]	6.2	[b]	13.9
Initial inpatient (1992)	[b]	7.1	[b]	21.8
Follow-up inpatient (1992)	[b]	15.1	[b]	50.4
Emergency Room Visits[a]				
New patient (1991)	7.1	[b]	12.5	[b]
Established patient (1991)	16.3	[b]	11.6	[b]
Emergency room visit (1992)	[b]	1.7	[b]	50.9
Nursing Facility Care				
Subsequent care	34.4	19.4	10.9	44.6

SOURCE: Physician Payment Review Commission analysis of 1991 and 1992 Medicare claims, 5 percent sample of physicians.

[a] Definition of levels within visit classes changed with the Medicare Fee Schedule. Percentages are reported separately for old and new levels.

[b] Not applicable.

areas. Because of this, primary care specialties, especially family and general practice, were expected to gain more relative to procedurally oriented specialties.[4]

Analyses revealed redistribution across specialties with significant gains in Medicare payment for family and general practitioners. In addition, while some physicians experienced reductions in Medicare revenue in the first year, the majority of family and general practitioners had increases in Medicare revenue.

[4] In addition, removal of explicit specialty differentials was also expected to increase payments to family and general practice physicians.

Table 19-3. Average Price for New Evaluation and Management Codes, 1992 and 1993 (dollars)

Visit Class	Quarter of 1992				Quarter of 1993	
	First	Second	Third	Fourth	First	Second
Office Visits						
New patient	51.64	51.39	51.19	51.40	51.49	51.28
Established patient	29.99	29.98	29.74	29.75	29.85	29.96
Hospital Care						
Initial care	86.82	87.49	87.49	87.69	88.23	88.49
Subsequent care	36.04	36.13	36.02	36.12	36.33	36.44
Consultations						
Outpatient	89.08	89.17	89.01	89.13	89.47	89.18
Initial inpatient	94.66	95.50	95.41	95.69	96.63	96.58
Follow-up inpatient	38.12	38.40	38.14	38.55	39.02	39.34
Emergency Room Visits	55.72	55.23	54.39	56.07	57.54	56.95
Nursing Facility Care						
Comprehensive assessment	47.41	47.65	47.47	47.64	48.26	48.18
Subsequent care	29.15	29.17	29.21	29.28	29.44	29.48

SOURCE: Physician Payment Review Commission analysis of 1992 and 1993 Medicare claims, 5 percent sample of beneficiaries.

NOTE: Average price is calculated for a class of EM visits using the average allowed charges for EM codes during the first quarter of 1992 as constant prices, weighting by the number of visits in each quarter for codes in the class.

Redistribution of Payments by Specialty. From 1991 to 1993, physicians' payments per service declined by 4 percent (Table 19-4). Average payment per service would have increased had the conversion factor not been undercalibrated, as documented in the Commission's *Annual Report to Congress 1993*. Changes in payment measured from 1991 to 1993 reflect four aspects of payment reform: two years of transition to the Medicare Fee Schedule, the uniform update for 1992, the differential update for surgical and nonsurgical services for 1993, and refinements to the relative values for 1993.

Surgical specialties had about an 8 percent reduction in payment per service compared with the small (2 percent) increase for medical specialties.[5] Specialties that predominantly provide EM

[5] While the introduction of new specialty codes over time improves descriptions of physicians, it presents difficulties for looking at changes over time. In 1992, emergency room (ER) physicians gained their own specialty designation. Analysis of claims from a sample of physicians for 1991 and 1992 showed that almost all ER physicians had been originally designated as general practitioners. For these analyses, ER physicians were redesignated as general practitioners, which lead to substantial changes in estimates of payments per service for family and general practitioners and for internists. In addition, vascular surgeons were combined with general surgeons, while cardiac surgeons were combined with thoracic surgeons.

Table 19-4. Change in Medicare Payment, by Specialty, 1991-1993 (percentage change)

Specialty	Medicare Payment per Service	Volume and Intensity of Services per Physician	Medicare Payment per Physician	Medicare Revenue per Physician*
Medical	2	8	8	4
Cardiology	-10	19	8	4
Family/general practice	17	6	23	19
Gastroenterology	-12	21	8	6
Internal medicine	2	-4	-2	-6
Other medical	0	19	16	12
Surgical	-8	4	-4	-8
General surgery	-6	4	-2	-6
Ophthalmology	-8	2	-8	-10
Orthopedic surgery	-8	4	-4	-10
Thoracic surgery	-16	10	-8	-12
Urology	-4	8	4	0
Other surgical	-2	4	2	-2
Radiology/Pathology	-12	16	2	0
Radiology	-12	15	0	0
Pathology	-16	32	10	6
All Physicians	-4	6	4	0

SOURCE: Physician Payment Review Commission analysis of 1991 and 1993 Medicare claims, 5 percent sample of beneficiaries.

* Includes balance billing.

services fared better. Payments to general and family practitioners increased by 17 percent over the two-year period, while those to internists rose by 2 percent. Pathologists and thoracic surgeons had the largest reduction of 16 percent followed by gastroenterologists, radiologists, and cardiologists with reductions ranging from 10 percent to 12 percent.

The total Medicare payment a physician receives depends not only on the payment per service but also on changes in the number and intensity of services billed. Although physicians had about a 4 percent reduction in payment overall, a 6 percent increase in the number and intensity of services per physician led to about a 4 percent increase in total Medicare payment per physician over the two-year period.

While payment rates to a majority of specialties fell, on average, most of these specialties provided more services. These increases, however, did not completely offset the reductions for most surgical specialties which had net reductions in Medicare payment. With restrictions on balance billing and higher participation rates, most surgical specialties had total reductions

in Medicare revenue ranging from 6 percent to 12 percent over the two-year period. Only urologists saw no change from 1991 to 1993. With increases in both payment per service and the number of services provided, family and general practitioners saw total Medicare payment increase by 23 percent from 1991 to 1993, while total Medicare revenue increased by 19 percent.

From 1991 to 1993, pathologists' Medicare payment increased 5 percent overall. For the most part, this gain reflects a one-time change that resulted from carriers' uniform adoption of CPT definitions in 1992. Previously, some carriers had provided a single bundled payment for multiple specimens. When these services were unbundled in 1992, the volume of pathologists' services climbed by 29 percent. The increase in volume per pathologist was only 2 percent from 1992 to 1993, however.

Changes in Medicare Payment for Individual Physicians. All specialties, whatever the impact on average, had both winners and losers. While the new fee schedule raised average payment for family and general practitioners overall, some may have had reductions in Medicare revenue. For example, a general practitioner might have lower Medicare payment levels due to redistribution by geographic location or changes in visit coding. In addition, lower Medicare payment could stem from changes in payment levels and the number and intensity of services provided.

Unless a physician's caseload consists entirely of Medicare beneficiaries, a physician's income includes not only the total Medicare payment and any balance billing but payments from other insurers as well. Since development of the Medicare Fee Schedule, however, more insurers are tending to use the resource-based relative value scale. Hence, changes in total Medicare payment may increasingly reflect changes in physicians' income over time.

Comparing total Medicare payment for a sample of physicians in 1991 and 1992, more than a quarter of all physicians saw increases of at least 20 percent, while a fifth had reductions of 20 percent or more (Table 19-5). And, although family and general practitioners were expected to gain under the Medicare Fee Schedule, one quarter had more than a 10 percent reduction in Medicare revenue in the first year. On the other hand, almost half of family and general practitioners experienced at least a 10 percent increase, as expected. At least one-fifth of internists, whether procedurally oriented or not, had increases of 20 percent or more in total Medicare payment.[6]

At least one-half of the physicians in most surgical specialties had reductions in total Medicare payment of 5 percent or more. Urologists were the exception, with about 40

[6] A procedurally oriented internist performed at least one of the following: heart catheterization, angioplasty, pacemaker insertion, upper gastrointestinal endoscopy, colonoscopy, electroencephalogram, scan of extracranial arteries, bronchoscopy, cardiovascular imaging, thyroid imaging, pulmonary perfusion imaging, dialysis, cystourethroscopy, nerve conduction study, or electromyography.

Table 19-5. Change in Total Medicare Payment, by Specialty, 1991-1992 (percentage)

Specialty	Reduction in Medicare Payment			Increase in Medicare Payment			Median Payment Change
	20% or More	10% or More	5% or More	5% or More	10% More	20% or More	
Medical	18.2	30.7	37.7	48.2	40.1	28.3	3.0
Cardiology	22.0	39.8	50.0	38.2	32.3	22.0	-4.5
Family/general practice	16.2	25.4	31.4	55.2	47.4	35.6	8.0
Gastroenterology	24.7	52.7	60.2	25.8	20.4	15.1	-11.0
Internal medicine, nonprocedural	17.7	31.0	37.9	46.5	37.2	21.8	2.0
Internal medicine, procedural	13.1	26.8	38.7	42.9	35.1	23.8	0.0
Other medical	22.1	35.9	42.8	43.6	35.2	25.2	0.0
Surgical	27.2	45.0	54.1	31.7	24.8	15.6	-7.0
General surgery	35.8	55.2	65.9	22.9	18.3	10.8	-13.0
Ophthalmology	15.5	40.8	53.4	29.9	21.8	14.9	-6.5
Orthopedic surgery	26.5	39.8	53.0	31.8	25.8	15.5	-5.0
Thoracic surgery	27.3	49.1	60.0	29.1	23.6	16.4	-9.0
Urology	15.0	33.6	39.8	41.6	33.6	18.6	0.0
Other surgical	30.3	45.8	49.9	36.1	27.7	18.3	-4.0
Radiology/Pathology	22.0	36.8	46.8	37.9	33.4	24.0	-3.0
Radiology	19.9	36.4	46.7	37.5	32.4	23.2	-3.5
Pathology	28.7	37.9	47.1	39.1	36.8	26.4	-2.0
Other	15.5	24.8	28.2	60.2	55.6	42.4	13.0
All Physicians	20.5	34.1	41.5	44.6	37.5	26.3	1.0

SOURCE: Physician Payment Review Commission analysis of 1991 and 1992 Medicare claims, 5 percent sample of physicians.

percent with reductions of at least 5 percent. On the other hand, at least 20 percent of physicians in each surgical specialty had increases in Medicare payment of at least 5 percent.

MEDICARE AND OTHER PAYERS

The gap between Medicare payment rates and those of private payers is a concern for physicians and beneficiaries. Currently, beneficiaries appear to have reasonably good access to physicians' services despite Medicare rates that are substantially lower than those of other payers. At some point, however, low payment rates may significantly affect physicians' ability or willingness to serve Medicare beneficiaries.

In recent years, payment stringency in the Medicare program has widened the gap between Medicare's rates and those of private payers. In 1994 the Medicare program will pay 59 percent as well as private insurers, and 69 percent as well as Blue Cross Blue Shield (BCBS).

Large differentials in payment between Medicare and private payers, combined with discontentment with Medicare's levels of payment, could compromise access to care for Medicare beneficiaries. Even if the payments cover the cost of care, physicians may prefer to accept patients with private insurance over those with Medicare. This would be especially true for physicians whose practices are at or close to capacity.

Projecting the future of payment rates is always difficult. Medicare's low volume growth in 1993 may lead to substantial updates and a narrowing of the difference between Medicare and private payment rates in 1994 and 1995. Beyond 1995, however, current law may result in a return to erosion of real (inflation-adjusted) Medicare fees. It is difficult to predict what effect health system reform might have on private payer rates to physicians or volume growth of services. For example, the gap between Medicare and private insurer payment rates could shrink if more competitive markets drive down private insurers' rates. Under a worst-case scenario, Medicare fees could fall to just 43 percent of private rates by the year 2000. This would be roughly comparable to the historical gap between Medicaid and private payment rates.

Physicians' Satisfaction with Medicare Compared to Other Payers

As part of the Commission's 1993 survey, physicians were asked to compare different payers: Medicare, Medicaid, private fee-for-service, and capitated plans. About 48 percent thought payment levels were a serious problem for Medicare; 60 percent thought this was so for Medicaid (Table 19-6). On the other hand, only 16 percent had a serious problem with private payer payment levels. About 15 percent of physicians had problems with external review and limitations imposed by Medicare, Medicaid, and private payers. Whereas 30 percent to 34 percent of physicians thought paperwork and administrative hassles were a problem in dealing with Medicare and Medicaid, 23 percent found similar problems with private payers. About a third of physicians with patients in capitated plans cited serious problems across each category. A substantially larger percentage thought that external review and limitations were a more serious problem with capitated plans than with other types of insurers.

Data on Private Payers' Rates

Estimating the gap between Medicare payments and average private payer fee levels is not easy. Although Medicare fees are publicly available, there is scant reliable information on private insurers' payment levels. Information is available for physicians' submitted charges, but almost all payers have some form of fee screen that reduces actual payments below charges. Nearly all payers regard their fee screens and the resulting average payment levels as proprietary information.

Understanding their need for confidentiality, the Commission has nevertheless been able to establish relationships with several large private insurers. Beginning in 1990, the Commission

Table 19-6. Physicians Citing Very Serious Problems with Insurance Plans, by Type of Plan (percentage)

Type of Problem	Medicare	Medicaid	Private Fee-for-Service	Capitated Plans
External review and limitations	14	15	15	32
Paperwork and administrative hassles	30	34	23	31
Reimbursement levels	48	60	16	33

SOURCE: National Opinion Research Center 1994.

NOTE: The analysis was restricted to physicians at least 10 percent of whose patients were in a given insurance plan.

began gathering private sector claims information to compare with Medicare data. By 1993, it had obtained data on payment rates of Blue Cross Blue Shield plans and commercial insurers that could be compared with other information obtained from a cross-section of private payers.

BCBS Data. The Commission has obtained data from two independent sources of BCBS physician payment information. The Blue Cross Blue Shield Association (BCBSA), which has collected summary claims information from some BCBS plans for many years, has shared selected extracts of those data with the Commission. These extracts show BCBS payment rates relative to Medicare for certain CPT codes but omit any information that would allow individual plans to be identified.

More recently, the Commission obtained claims extracts for federal employees enrolled in the Federal Employee Program of the Blue Cross Blue Shield Association. These are blind claims extracts that prevent identification of individuals or plans. The presence of the full spectrum of CPT codes and individual claims-level detail allows for much more detailed analysis than does the BCBSA claims summary extract.

Commercial Insurer X. The Commission was also able to get claims from a major national commercial insurer. Under the claims agreement, the Commission cannot disclose the name of this insurer. Claims from commercial insurer X reflect the experience of several million covered lives.

MEDSTAT Data. The MEDSTAT corporation gathers claims for employees, primarily of Fortune 500 companies. These claims are processed to a common format to provide a nationwide private insurer dataset. The MEDSTAT data purchased by the Commission reflect the experience of several million insured individuals, but enrollment is concentrated disproportionately in the Midwest. Because MEDSTAT gathers claims from a wide variety of employers, it probably provides a reasonable cross-section of insurers. Inasmuch as the data

are gathered largely from large companies, however, they may overrepresent commercial insurers.

Each of the sources of data went through an extensive validation process. In some instances, partial bills and corrections were matched to generate final adjusted claims. Claims for which the private payer was the secondary insurer, such as Medigap claims, were also removed because payment amounts on such claims do not reflect the total payments made to physicians. Errant records, such as incomplete or partial bills, were removed. Finally, a trimming process commonly used by the HCFA Office of the Actuary and carriers was used to eliminate obviously erroneous bills.

Payment data in this analysis reflect average actual payment to physicians, net of any balance billing. Fee data reflect allowable charges, rather than submitted charges, and include copayment and deductible amounts.[7] The claims represent each payer's total fee-for-service business. This includes services for which the payer is the insurer, as well as those where the payer merely administers insurance through its claims processing and fee screens, such as third-party administrator or administrative services-only contracts. Both traditional indemnity and preferred provider organization types of insurance are included.

All the price comparisons are based on the Medicare service mix, rather than the service mixes of the individual private insurers. This allows for a more uniform comparison across insurers. This choice of Medicare weights does, however, widen the estimated fee gap by some 3 to 5 percentage points relative to fee gaps estimated using the private sector case mix. This occurs because Medicare pays relatively more poorly for procedures than it does for evaluation and management services, and Medicare beneficiaries' service mix is weighted more heavily toward surgery and procedures.

Finally, not all sources of data are available for every year. Annualized growth rates for each payer were calculated from actual data. Where data are missing, the estimated gap between Medicare and private payers is imputed assuming that private fees grew at 3.4 percent per year, the median of the estimated private sector growth rates.

There is no "gold standard" against which to compare these private sector fee data. From the standpoint of estimating national average payment rates, the individual sources of data are far from perfect. They may not be representative of the United States geographically, and they might pay better or worse than average.

Despite these limitations, one can be reasonably confident about the resulting fee information. This is because the findings from these data sources are similar and concur with what is known about the overall structure of the health insurance market. First, the two

[7] That is, payments (including copayment and deductibles paid directly by enrollees) exclusive of any balance billing amounts.

sources of Blue Cross Blue Shield data agree closely (Table 19-7). They show both a similar level and trend in rates. Second, rates for the BCBS plans are significantly lower than for the commercial insurer, again consistent with the known facts about the market. Finally, the MEDSTAT data yield rates that are fairly close to a weighted average of the BCBS and commercial rates.

Recent Trends in Medicare Rates

All available data sources show a similar widening of the gap between Medicare's and private sector payment rates in response to recent stringency in Medicare payment policy. This comparison forcefully demonstrates the impact that recent changes in Medicare policy have had on the disparity between its payment rates and those of private payers.

Medicare payment rates actually fell on average between 1989 and 1993. For 1994, however, rates were updated an average of 6.8 percent, resulting in an overall annual growth in Medicare rates of 0.5 percent during the period from 1989 to 1994. Payment rates for private insurers increased significantly more rapidly over this period. The median annual growth rate for private insurers was 3.4 percent.[8]

The disparity between growth rates of Medicare and private sector payments has exacerbated the difference in payment levels. In 1989, the Medicare program was paying rates that were roughly 68 percent of private payers. In 1994, these are estimated to have fallen to 59 percent of the average rates paid by private payers. Medicare pays about 54 percent as well as commercial insurance and 69 percent as well as the average BCBS plan.[9]

Future Trends in Medicare and Private Insurer Payment Rates

The level of Medicare payment rates relative to those of private payers may continue to decline under current law or recently proposed health system reform alternatives. The following discussion projects the fee gap to the year 2000 under both current law and the Administration's health care reform proposal, which would tighten Medicare Volume Performance Standards.

Because many of the important determinants of payment rates are unknown, projections are made under a variety of scenarios. The trend in Medicare payment relative to private insurers will largely depend on two factors: volume growth in the Medicare program and payment rate increases of private payers.

[8] Estimated private sector fee growth is much lower than the physicians' fee component of the consumer price index (CPI), which rose at an average annual rate of 6.8 percent between 1989 and 1992. This is reasonable, however, because the CPI uses list prices (submitted charges) and does not reflect the significant growth in discounting of payments relative to charges. The slower rate of growth increases confidence that discounts are being reflected in the claims data.

[9] If private sector service mix had been used in these calculations, however, the estimated gaps would have been roughly 3 to 5 percentage points smaller, with Medicare estimated to pay roughly 65 percent of private sector rates in 1994.

Table 19-7. The Relationship between Medicare and Private Payers' Rates, 1989 to 1994

	1989	1990	1991	1992	1993	1994	Annualized Growth (Percent)
Medicare (1989 = 100)	100	102	98	95	96	103	0.5
Blue Cross Blue Shield							
Summary Data							
Fee level*	127	131	134	(138)	(143)	(148)	2.8
Ratio of Medicare to private	0.79	0.78	0.73	(0.68)	(0.67)	(0.69)	
Federal Employee Program							
Fee level*	127	133	136	(140)	(145)	(150)	3.5
Ratio of Medicare to private	0.79	0.77	0.72	(0.68)	(0.66)	(0.68)	
Commercial Insurance							
Commercial insurer X							
Fee level*	(162)	167	171	179	(185)	(191)	3.3
Ratio of Medicare to private	(0.62)	0.61	0.57	0.53	(0.52)	(0.54)	
Average Private Payer							
MEDSTAT data							
Fee level*	149	157	160	(166)	(171)	(177)	3.6
Ratio of Medicare to private	0.67	0.65	0.61	(0.57)	(0.56)	(0.58)	
Average of Blue Cross Blue Shield and Commercial							
Fee level*	(147)	152	158	(163)	(168)	(174)	3.4
Ratio of Medicare to private	(0.68)	0.67	0.62	(0.58)	(0.57)	(0.59)	

SOURCE: Physician Payment Review Commission analysis of Medicare and private sector claims data.

* Indexed value where Medicare 1989 is set at 100.

NOTE: These estimates were calculated using Medicare service mix. Use of private payers' service mix would narrow estimated payment gaps by 3 to 5 percentage points. Extrapolated data are in parentheses.

Medicare volume growth has changed significantly in recent years. Between 1986 and 1991, volume per beneficiary grew, on average, at an annual rate of roughly 7.8 percent. From 1991 to 1993, however, this rate dropped to less than 3 percent. In light of this uncertainty, two volume and intensity growth rates were used for these simulations: the historical rate of 7.8 percent and an average of historical and recent rates equal to 5.4 percent.

Private insurers' payment rates were assumed to grow at the underlying rate of inflation in physicians' costs, the Medicare Economic Index (MEI). This is projected to be 2.3 percent per year.[10]

[10] The effects of alternate assumptions regarding private sector fee growth are noted below.

Two different Medicare policies were simulated. The first uses current law, under which the VPS default formula is assumed to determine fee updates. The second incorporates the VPS-related provisions in the Administration's proposal, which include a 3.0 percentage point reduction in the 1995 update for nonprimary care services, along with the proposed VPS revisions.[11]

Simulation results suggest that Medicare rates will become slightly less attractive under current law but will probably fall significantly under the VPS provisions in the Administration's proposal (Table 19-8). In this simulation, Medicare payment rates begin at 62 percent of private rates in 1991. Under current law, Medicare rates would average either 54 percent or 61 percent of private rates in the year 2000, depending on the rate of Medicare growth in volume and intensity. Under the Administration's provisions, Medicare rates in the year 2000 would average either 43 percent or 52 percent of private rates, depending on the rate of Medicare growth in volume and intensity.

Differing assumptions about the rate of growth of private sector fees would affect these results. If private sector fees continue to climb at their historical rate of 3.4 percent per year, the estimated gaps between Medicare and private sector payment rates would widen between 4 and 5 percentage points. If, on the other hand, private rates saw no update during this period (perhaps because of competitive pressure under a reformed health care system), gaps would narrow by between 10 and 13 percentage points.

Table 19-8. Estimated Medicare Payment Rates Relative to Private Payers, Year 2000
(ratio)

	Current Law	Administration's Proposal
Rate of Volume Growth		
Historical rate of 7.8 percent	54	43
Average rate of 5.4 percent	61	52

SOURCE: Physician Payment Review Commission analysis of Medicare and private sector claims.

NOTE: Average Medicare rates as a percentage of private payer rates using Medicare service mix.

[11] See Chapter 22 for a detailed discussion of the changes in the VPS.

REFERENCES

Physician Payment Review Commission, *Annual Report to Congress 1993* (Washington, DC: 1993).

CHAPTER 20

ENSURING FAIR AND ACCURATE PAYMENT UNDER THE MEDICARE FEE SCHEDULE

Medicare physician payment reform was enacted with the goals of rationalizing the basis of physician payments, limiting beneficiaries' financial liability for health care costs, and creating a mechanism for controlling future expenditure growth. When fully implemented in 1996, physician payment as described in the Omnibus Budget Reconciliation Act of 1989 (OBRA89) will be determined by the Medicare Fee Schedule, limited balance billing of beneficiaries, and fee updates permitted under Volume Performance Standards (VPS). As the fee schedule has been phased in, some payment policies have been changed, revisions to others have been proposed, and new policy issues have arisen.

One of the Commission's responsibilities to the Congress is to track implementation of payment policies based on the fee schedule. Many of the Commission's projects, such as those monitoring beneficiary access to care, are designed to identify any problems resulting from the introduction of the new policies. This chapter reports on previous and outstanding policy changes. The analysis described below has led the Commission to make the following recommendations.

RECOMMENDATIONS

The Congress should define a process for implementing changes to the Medicare relative value scale based on three principles:

- **The relative value scale should be usable by all payers.**
- **Changes in the relative values for services should be made only to make resource-based payment more accurate.**
- **Changes in the relative amounts of the aggregate work, practice expense, and malpractice expense components of the relative value scale should be made only to improve the accuracy of the relationships among them.**

Other Medicare policy goals should be pursued through bonus payments and other mechanisms. Provisions of the Administration's health care reform proposal to change relative values to promote primary care are contrary to these principles.

In order to comply with congressional directives for budget neutrality or savings in a manner that is consistent with these principles, the Health Care Financing Administration should be given the authority to change the Medicare conversion factor as well as to adjust relative values.

The Commission reiterates several earlier recommendations that would promote fair payment:

- **Resource-based practice expense and malpractice expense relative values should be incorporated into the fee schedule.**

- **Medicare and pediatric adjusters should be developed.**

- **Differential updates for services in the three Volume Performance Standard categories should affect payment for one year only.**

This chapter first reports on implementation of the Medicare Fee Schedule by reviewing some of the most important changes that have occurred since the new payment policies were introduced in 1992. Two different types of unresolved policy recommendations are then described: those that the Commission or the Administration has proposed, and new ones that the Commission expects would improve the implementation of policy changes. The Commission's recommendations are aimed at identifying those policy changes needed to ensure equitable payment to physicians under the Medicare Fee Schedule. Finally, the chapter provides updated estimates of the expected effect that recently implemented policies will have on relative payment rates once the fee schedule is fully in place in 1996.

PAYMENT POLICY CHANGES AND REFINEMENT SINCE 1992

Implementation of the Medicare Fee Schedule began in 1992 and will be complete by 1996. The Medicare Fee Schedule is based on a relative value scale (RVS) composed of three components: physician work, practice expense, and malpractice expense. It was introduced in a budget-neutral manner, so that total physician payments in 1992 equaled those that would have been made had there been no change in payment policy. During the transition period, payment is based on a combination of previous allowed charges and the fee schedule amount. By 1996, the fee schedule will be the basis for all payment. In general, modifications to the fee schedule are also budget neutral, except when they are explicitly designed to produce budget savings.

There have been a variety of changes to Medicare physician payment policy since 1992. These include:

- refinement and updating of relative work values;

- reductions to practice expense relative values as prescribed by OBRA93;
- creation of three service categories for the VPS process, one each for surgical, primary care, and all other services; and
- implementation of several service-specific and physician-specific policies, such as payment for electrocardiogram (EKG) interpretation, site-of-service differentials, and payment to new physicians.

The first two of these directly affect the fee schedule, while the last two relate to other aspects of Medicare payment policy. The impact of each of these four changes on physician payment differs in magnitude and distribution across physician specialties. Revisions to relative work values, for example, are made in a budget-neutral manner, whereas the OBRA93 practice expense reductions led to budget savings. The rest of this section discusses each briefly.

Refinements and Updates to Relative Work Values

The physician work component of the fee schedule determines how about half of Medicare physician payments are distributed, reflecting physician survey data suggesting that net income accounts for roughly 50 percent of physicians' revenues. In mid-1991, the Health Care Financing Administration (HCFA) published tentative relative work values based on studies conducted by Harvard University researchers of the relative time and effort required to perform different physicians' services (HCFA 1991a; Hsiao et al. 1988). These relative values were revised in response to public comments, and the final relative work values were first used for Medicare payment on January 1, 1992.

As discussed in the Commission's 1993 annual report, three distinct issues related to refining and updating relative work values have arisen since the fee schedule first went into effect. These concern:

- correcting errors in the original values established in 1992;
- developing values for new and revised service codes; and
- reviewing relative work values periodically to ensure that they still accurately reflect physicians' work, given changes in medical technology and the types of patients for whom particular services are provided.

HCFA invited public comments on the initial relative work values as part of its formal refinement process, which was designed to improve their accuracy. The agency issued a list of some 200 services for respondents to use as references when proposing changes to specific relative work values. Approximately 7,500 comments were received addressing the relative work values of about 1,000 different codes, most of which commenters thought were too low.

HCFA analysis suggested that if all proposed work value increases were implemented, total relative values for all services would have to have been reduced by 9 percent to maintain budget neutrality.

Through deliberations with multispecialty panels and a decisionmaking process requiring clear consensus to change an existing work value, about 360 work values were increased and 35 decreased for the 1993 fee schedule. The changes required a 2.8 percent reduction of all relative values to avoid driving up Medicare spending. Although this approach resulted in identifying more undervalued than overvalued codes, the exercise showed that a small-group process has promise. Of the many codes that respondents did not question, some may still need refinement. Because HCFA ended its refinement of the original 1992 relative values in 1993, remaining errors in those values will not be corrected until the review of the entire RVS that HCFA is required to conduct by 1997.

Each year, the Current Procedural Terminology (CPT) Editorial Panel revises the meaning of some existing codes and introduces new codes. As a result, HCFA must repeatedly adjust relative work values for revising codes and creating values for new ones. To meet this need, the agency has developed a process to establish interim work values for new and revised codes, a process based largely on recommendations of the American Medical Association's (AMA) RVS Update Committee (RUC). Values proposed by the committee are in turn reviewed by HCFA panels composed of carrier medical directors and HCFA staff. The interim values are the basis of payment until after a public comment period, when HCFA finalizes the values based on the comments it receives.

When the update process began in 1992, there was concern that the evaluation and management (EM) services central to primary care medicine might be passively devalued because of the budget neutrality requirement for revisions of the relative value scale. When relative values are added to account for new and modified technologies and procedures, the relative values of all other services must be decreased to offset the projected additional expenditures. Over time, EM and other primary care services could be substantially devalued.

HCFA is using a technique to minimize this problem in cases where existing codes are revised simply to reflect changes in procedures. It now keeps the changes budget neutral within groups of related services, such as the codes for coronary artery bypass operations. This approach insulates the values of other unrelated services (including EM services) from being passively devalued over time. When revisions result in the addition or subtraction of aggregate relative value units, however, making the adjustments budget neutral within groups of closely related services will change how the group relates to the rest of the relative value scale. HCFA has said it intends to consider the appropriateness of these changes as part of the periodic review of the entire relative value scale (HCFA 1993). This is the appropriate process for making these cross-specialty judgments fairly. The alternative—not making code revisions budget neutral within groups of related services—has the same potential to generate

inappropriate distortions in the relative value scale, but these distortions would be more diffuse and difficult to correct.

When codes are created for entirely new services or technologies that have no direct relationship to existing codes, budget-neutral adjustments theoretically should not be made to the relative values of other services. If a service code were established before the new service is widely used, the first-year expenditure increases would usually be minimal. For Medicare, budget-neutral adjustments are required only if spending is projected to rise more than $20 million from such a change. Future growth in the volume of the service would be included in the appropriate VPS, so that payment rates for primary care services would not be reduced by the dissemination of new procedures and diagnostic tests. If Medicare decided to cover the service after it was being widely used, however, the additional first-year expenditures might be greater, as in the case of the expected broadening of Medicare coverage to include case-management services. The budget-neutrality adjustment from Medicare-specific changes in payment policy should be accomplished by reducing the Medicare conversion factor, which translates relative values into payment amounts.

In practice, the new and revised relative values created by the 1992 update process would have increased Medicare expenditures by about 0.2 percent in 1993, requiring a corresponding reduction in all relative values to maintain budget neutrality. For 1994, HCFA has implemented relative work values for new and revised codes that necessitated only a 0.1 percent decrease in all relative values. This suggests that, compared with the original refinement process, the yearly update process has a much more limited impact on the fee schedule and does not significantly devalue primary care services.

Although this update process appears to be effective, some improvements are needed. In particular, the Commission has recommended increased primary care physician representation on the RUC and a formalized, clear description of HCFA's review process for establishing values for new and revised codes. HCFA's update process should meet certain requirements, which were described in the Commission's 1993 annual report. These include:

- mechanisms to promote consistent decisionmaking, such as a set of reference services; use of objective data on service content, time, and volumes (when dealing with revised or combined codes); and formal decision rules;
- fair methods and representation of involved parties;
- means to identify relatively overvalued as well as undervalued services;
- public accountability; and
- feedback to the CPT Editorial Panel when codes need revision to achieve accurate resource-based payment.

Finally, no process has been established for the required periodic review of relative work values. A comprehensive review of the work component of the fee schedule is necessary to avoid distortions over time from changes in the practice of medicine and from the yearly update process for new and revised codes. This review, which is required by law every five years, should meet the same requirements the Commission recommends for the update process. It should refine individual relative work values and address any existing systematic problems, such as mismeasurement of work done before and after a service, compression of the scale of values, and inaccurate placement on the scale of groups of related services. The first periodic review must examine all codes, but subsequent ones could be done on a rolling timetable. HCFA should consider the various processes that could be used for carrying out this review but should retain ultimate responsibility for decisions on the accuracy of the relative values.

The update and periodic review processes will be needed as long as the fee schedule is the basis of physician payment. These sources of change to the relative work values have revealed the need for clear guidelines on how to maintain budget neutrality when fee schedule changes are implemented.

OBRA93 Practice Expense Reductions

About 45 percent of physician payments are based on the practice expense component of the Medicare Fee Schedule. But unlike the relative work values discussed above, neither the practice expense nor the malpractice expense component of the fee schedule is based on an analysis of the relative resource requirements of various services. Instead, these components are determined by a formula driven primarily by historical Medicare-allowed charges. The Commission originally suggested the use of charge-based relative values for these components only as an interim measure. Since then it has developed resource-based methods for determining practice expense and malpractice relative values. In 1993, it recommended that these parts of the fee schedule be revised.

The Administration's fiscal year 1994 budget proposal included two provisions related to the practice expense component of the Medicare Fee Schedule. First, services considered overvalued with respect to practice expense relative values were identified, so that the Medicare system could realize savings by reducing payment for these services. As specified in OBRA93, reductions to the practice expense component apply to any service not typically performed in a physician's office for which the practice expense relative value exceeds the service's relative work value by more than 28 percent.[1] The reduction will equal 25 percent of the difference between the practice expense values and relative work values in each of the next three years. In no case will the practice expense relative value be reduced below 128 percent of the relative work value.

[1] For these purposes, a service is considered office based if it is performed in a physician's office more than 75 percent of the time.

The notion of overvalued practice expense relative value presumably was based on the Commission's research on the feasibility of deriving resource-based practice expense relative values. The Commission's pilot study identified a number of services for which the practice expense component is relatively misvalued compared with resource-based estimates. Because these estimates of resource-based practice expense payments were calculated in a budget-neutral manner, they identified services that are overvalued in a relative, not an absolute, sense. Nevertheless, analysis revealed that the changes in relative values that would result from the OBRA93 formula-driven reductions to current practice expense relative values would move relative values toward those expected under a resource-based approach.

In addition to changing practice expense relative values, the reductions are expected to yield savings of about $1.9 billion over five years, according to the Congressional Budget Office (CBO). CBO's estimates are based on the assumption that physicians will offset half the total reduction created by relative value cuts by increasing volume. Therefore, if volumes are unaffected by this payment rate cut, savings would total nearly $4 billion between 1994 and 1998. Commission analysis suggests that the greatest reduction will be in total payments to ophthalmologists. Unlike refinement of work values, these changes are not budget neutral. Their introduction has also affected the relationships among the three components of the fee schedule.

Another provision in the Administration's budget proposal was a directive to HCFA to develop resource-based practice expense relative values to become effective in 1997. This item was included in both the House and Senate budget reconciliation bills. Because it violated Senate rules that prohibit including in budget legislation any items without direct budget implications (the so-called Byrd Rule), however, this provision was not in the final legislation. The Administration's health system reform proposal includes this same provision to introduce resource-based practice expense relative values into the Medicare Fee Schedule. In addition, several members of Congress have said they intend to include this provision in future legislation.

Multiple Volume Performance Standards

As specified in OBRA89, the fee schedule was originally based on a single conversion factor, calculated to ensure that payments for physicians' services in 1992 did not exceed those that would have occurred under previous payment policy. Under the Volume Performance Standard, the update to this conversion factor could be different in 1993 for surgical services and nonsurgical services. In fact, the two update factors were 3.1 percent and 0.8 percent, respectively.

As discussed in previous reports, the Commission has been concerned about how separate VPS updates might affect relative payments under the fee schedule. It has concluded that a single target and update would best maintain the integrity of the resource-based relative value scale. Because the legislation required separate updates, however, the Commission concluded

that three separate service groups were needed so that payment for primary care services would not be eroded if overall growth of nonsurgical services exceeded targets. The Commission also maintained that differential updates should apply for only one year to prevent relative payments from deviating from the relative value scale in the long run.

Consistent with the Commission's recommendation, OBRA93 specified that there should be three separate groups of services for the purposes of fee updates. For 1994, the updates for surgical, primary care, and other nonsurgical services are 10.0 percent, 7.9 percent, and 5.3 percent, respectively (HCFA 1993). Combined with the differential in 1993, the update for surgical services since 1992 has been 13.4 percent; that for primary care services, 8.8 percent; and that for other nonsurgical services, 6.1 percent.[2] The expected cumulative effect of differential updates on relative payment rates by 1996 and 2000 is analyzed in the last section of this chapter.

Other Payment Policy Changes

Finally, a variety of policy changes have affected a particular group of services or physicians. Two that provoked the most public debate have now been revised, namely payments for EKG interpretation and to new physicians.

OBRA90 revised Medicare policy to discontinue making separate payments for EKG interpretation. Instead of making separate payments, the relative values of physician visits were increased to include the work associated with EKG interpretation. Many groups, including the Commission, argued that this policy distorted relative work values and was inequitable because EKGs are interpreted only by a limited set of specialists. The Commission recommended revising this policy, so that Medicare would pay separately for EKG interpretation at the appropriate fee schedule amount (PPRC 1991). This change could be accomplished in a budget-neutral manner, the Commission suggested, by reducing visit code values by whatever amount was initially added on when separate EKG payment was eliminated.

As part of OBRA93, separate payment for EKGs under Medicare was reinstated. In the final regulations for the 1994 fee schedule, HCFA stated that relative values for visit codes were reduced by the same amount by which they were originally increased when EKG payment was eliminated (HCFA 1993). This adjustment was not sufficient to ensure budget neutrality,

[2] This does not reflect the change in definition of surgical services for the VPS process. In 1993, the surgical update was applied to certain services when provided by surgical specialists. Starting in 1994, the VPS groups are defined solely by service code, regardless of physician specialty. The cumulative surgical update reported here compounds the 1993 and 1994 updates, which is, in fact, the experience of surgical specialists for the affected services. The other two figures are based on the 1993 nonsurgical update and the two 1994 figures. Two groups were omitted. These include surgical services provided by nonsurgeons (the nonsurgery update applied to this group in 1993 but the surgical update applied in 1994) and any services removed from the surgery group between 1993 and 1994 and provided by surgeons, to which the 1993 surgical and 1994 nonsurgical, nonprimary care update would apply.

because of a miscalculation that was made when the EKG payment policy was changed in 1992. Therefore, all relative values in the fee schedule, including those for EKGs, were reduced by 0.3 percent.

OBRA93 also eliminated the reduction of payments to new physicians. Under previous policy prescribed by OBRA90, physicians had received lower payments for their first four years of billing Medicare, with the reduction shrinking from 20 percent to 5 percent during that period. Because the reduction is inconsistent with the philosophy that guides resource-based payment for physicians, namely that payment for a particular service should be the same regardless of what type of physician provides it, the Commission recommended the change that was enacted with OBRA93. HCFA has determined that the budget-neutral introduction of full payment to new physicians in 1994 required a 0.9 percent reduction in payment to all physicians. The reduction was applied to relative values and transition amounts for nonanesthesia services as well as to the anesthesia conversion factor.

Since the fee schedule was adopted, there have been other policy changes such as the introduction of a site-of-service differential for some services and changes to Medicare payment localities, which define the areas to which particular geographic adjustment factors apply. While these have received less public attention, for certain groups of physicians they have affected payments as much as the policies described above.

When affected services are provided in outpatient or hospital settings, their practice expense payment is subject to the 50 percent site-of-service reduction. The reduction applies to a list of more than 300 services that are typically performed in hospital outpatient departments. The list of affected codes has been changed twice since the original list of 380 codes was released in the final fee schedule regulations in 1991; in 1993, 325 codes were subject to the reduction, while the most recent regulations list 333 codes (HCFA 1991b; 1992; 1993). The changing list of affected codes makes the policy appear capricious to physicians who provide these services. Although the Commission agrees that a resource-based fee schedule should incorporate a site-of-service differential, its analysis shows that the use of a fixed differential for a limited set of services does not mirror payments that would obtain under a resource-based approach. Presumably, the site-of-service differential has led to a slightly higher conversion factor than would have been in effect had payment for these services not been reduced.

Responding to numerous requests from physician groups to create statewide Medicare payment areas, HCFA developed a specific procedure whereby such groups could apply for this change, as long as there was wide support among the affected physicians. In its analysis of the payment areas described in the 1992 annual report, the Commission suggested that historical localities were inconsistent with notions of administrative simplicity and of systematically combining areas with similar price levels. The Commission proposed an approach to defining payment areas that would have resulted in statewide areas for all but the 15 states with large within-state price variation.

Since implementation of the fee schedule, physicians in five states have successfully applied for conversion to statewide payment areas.[3] All but one of these would have been statewide areas under the Commission's recommendation.[4] Implementation of these payment area changes was done through revisions to the geographic adjustment factor so that total payments within an affected state and the geographic adjustment factors of other payment areas were unchanged. As of 1994, there are 21 statewide payment areas; the remaining 29 states contain a total of 193 payment areas.

NEW AND UNRESOLVED PAYMENT POLICY ISSUES

Many other payment policy changes have been proposed by the Commission and others, including the Administration. During the course of designing and implementing the policy changes described above, the Commission, the Congress, and the Administration have had to grapple with new issues that may require further legislation. This section describes two types of policy issues: specific legislative or regulatory proposals that need action by the Congress or the Administration, and new issues that may require legislation or regulations. The first group of issues is organized according to whether they were proposed by the Commission or Administration. The new issues are those that the Commission has identified through its review of the implementation of the above policy changes. They focus on the implications of alternative approaches to achieving budget neutrality or savings when implementing new policies.

Outstanding Commission Recommendations For Policy Changes

Over the past several years, the Commission has identified several aspects of the fee schedule and payment policy that should be improved to ensure fair payment. These recommendations are likely to become more important as other payers adopt the Medicare Fee Schedule or if, under health system reform, fee-for-service payment is based on the fee schedule (see Chapter 4 and Appendix A).

Resource-Based Practice and Malpractice Expense Relative Values. In the Commission's view, replacing the practice expense and malpractice expense components of the fee schedule with resource-based relative values is essential to creating an equitable payment system for Medicare and—through broader use of the fee schedule—for other payers. The current charge-based elements perpetuate the distortions in relative payments that occurred under previous policy and that payment reform was designed to eliminate.

[3] Beginning in 1992, Minnesota, Nebraska, and Oklahoma became statewide Medicare localities. More recently (in 1994), North Carolina and Ohio were converted to statewide payment areas.

[4] According to Commission analysis, the price variation within Minnesota is high enough to merit several payment areas.

As described above, both the Administration and the Congress have shown interest in implementing such a change to the practice expense component of the fee schedule. Some stakeholders, however, are concerned about this recommendation. In part, this concern may be due to the fact that, although the Commission's research and its recommendation are based on a budget-neutral transition to resource-based relative values, the Administration used the Commission's work to identify savings in the budget. Together, the Commission's recommendation and the Administration's budget proposal have brought the issue to the public's attention and have stimulated new research and analysis. Many studies of practice expenses are now under way, several of which are being sponsored by physician specialty societies so that they understand how their members would be affected by these changes.

Although their designers intend these studies to advance the policy debate, many of the studies do not provide the information needed to do this. In particular, some aspects of the Medicare Fee Schedule and the Commission's research on resource-based practice expense relative values have been misunderstood or misstated in some of these analyses, hampering their usefulness in improving payment policy. The key issues that have been overlooked or confused in some of these analyses include:

- the relationship of reported costs to payments under a prospective scheme like the Medicare Fee Schedule,
- the difference between relative values and payment levels and the determinants of each, and
- the impact of changes to relative values on the distribution of payments across specialties.

Because adoption of the fee schedule was not designed to produce budget savings or increases, the initial conversion factor was calculated to ensure that total Medicare physician payments under the fee schedule in 1992 would equal those that would have been made under previous payment policies. The relationship between total payments for practice expenses and total physician practice costs is therefore determined by the conversion factor, not by the practice expense relative values. Total payment for practice expenses under the fee schedule could be less than total physician practice costs under either of two conditions:

- the budget for Medicare physician payment is less than the cost of all of the resources (including physician work) required to care for Medicare beneficiaries;
- within physician practices, Medicare revenue is distributed differently from other sources of revenue, so that the overall revenue share data used to combine the three components of the fee schedule are not representative of Medicare revenue shares.

Recent analysis by the Commission reveals that Medicare payment rates are, on average, 59 percent of private payers'. Medicare payments, when compared with average practice cost data, are likely to appear inadequate (see Chapter 19). To the extent that physicians believe they cannot reduce their practice costs and malpractice insurance premiums, they may regard Medicare's relatively lower payments as covering costs at the expense of their net income. But whether aggregate payment levels are sufficient to cover total physicians' costs is a separate question from how to develop relative values that accurately reflect resource use.

These considerations make it difficult to interpret findings from analyses of actual service costs for limited groups of services. When discussing these issues with representatives of concerned groups, the Commission has stressed that such studies are of relatively little value. Research could be more constructively directed toward advancing the techniques needed for resource-based payment of practice expenses, such as the categorization of costs as direct and indirect through careful identification of the types of costs incurred in providing physician services and maintaining a practice. Estimates of costs from limited surveys are of much less value than, for example, insights into how to identify and handle certain types of costs—such as medical staff time not involved in patient care—especially if these costs differ for different types of physician practices.

Critics of the resource-based approach have correctly noted that there is no available database to support the calculation of resource-based practice expense relative values. The Commission expects the current HCFA-supported research project on costs associated with care in different settings will provide a helpful starting point for constructing such a data resource. It hopes to work with HCFA and its contractor when these data are available to analyze the appropriateness of using them for this purpose.

Adjusting Payment for Patient Characteristics That Affect Work. The fee schedule's relative work values are calibrated to the work required to provide a service to a typical patient who receives the service. This is fair as long as physicians treat similar proportions of patients who differ from the average patient. Individual physicians, however, may be under- or overpaid if their patients differ systematically from those of other physicians in ways that affect the amount of work required to provide care. This may cause payment inequities for physicians and create incentives not to care for the most complex and needy patients. To avoid this, the fee schedule should be modified to better reflect patient factors that affect work.

The need for Medicare and pediatric adjusters—another Commission recommendation—will become even more important as the Medicare Fee Schedule is more widely used as the basis of payment for a broader group of patients. These adjusters are necessary partly because the original Harvard study on physician work constructed a scale of work that applied to a broad patient population. Payment needs to be adjusted whenever the relative value for a code is based on the amount of work needed to provide the service to non-Medicare adult patients and more work is required to provide the service to Medicare or pediatric patients. HCFA has

not implemented a Medicare adjuster, but noted in its final regulations for the 1992 fee schedule that the issue merits further study.

Revisions to the coding system and the use of modifiers can provide additional ways for payment to reflect differences in work related to patient characteristics. For example, some argue for a severity-of-illness modifier to adjust payment for those services where severity of illness substantially affects work. The practical difficulties in developing such a modifier, however, suggest that payment policies and codes should first be changed to account for severity of illness where needed. The need for a severity modifier should then be reassessed.

Noncumulative Update Factors. Finally, several of the Commission's recommendations stem from its concern that using different update factors for different groups of services, as required by current law, will distort relative payment over time. To avoid this, only one update factor should be used. If the law requiring the use of multiple update factors is not changed, differential updates should apply for one year only, to avoid cumulating distortions in relative payments.

The Administration's Policy Proposals

The Administration's health reform proposal includes several changes to Medicare physician payment. Some of these are designed to produce savings to finance reform; others are aimed at improving relative payment for primary care services. The latter include:

- increasing by 10 percent the practice expense relative values for primary care services;
- boosting by 10 percent the relative work values of office visits in 1996;
- decreasing the relative values of office consultations to equal those of comparable office visits, applying the savings to increase the relative values of office visits;
- reducing the relative work values of procedures or classes of procedures for which the work intensity (relative value units per minute) exceeds a threshold to be set by the Secretary of Health and Human Services, and applying the savings to increase the relative work values of primary care services;
- developing a methodology for implementing resource-based relative values for practice expenses in 1997;
- setting the primary care VPS target an additional 1.5 percentage points above gross domestic product (GDP) growth; and

- increasing to 20 percent the bonus payment for primary care services delivered in Health Professional Shortage Areas.

These last three proposals are discussed elsewhere in this chapter, and in Chapters 21 and 22, respectively. The proposal to raise practice expense relative values for primary care services by 10 percent presumably is intended to anticipate the implementation of resource-based values, although the legislation does not explicitly state whether this bonus would be transitional. Applying the 10 percent bonus after resource-based values are implemented would directly violate the resource-based nature of the relative value scale.

The Commission opposes the remaining proposals to increase relative values for primary care services because they would violate the resource basis of relative payment. The 10 percent increase in the work component of office visits is an arbitrary amount with no justification in relative resource requirements. The Administration's rationale is that time spent by physicians before and after visits was not fully accounted for in the original relative values assigned to office visits. This directly contradicts the results of the Commission's Visit Survey, which revealed that the Harvard study on which the original values were based systematically overestimated pre- and post-time for visits and consultations (PPRC 1991).

The plan to reduce payment rates for office consultations to equal those of office visits is also inconsistent with research findings. The Commission's past work suggests that consultations should have higher work intensities than other types of visits (PPRC 1992; 1993). The average work intensities of office consultations and office visits are already nearly identical (PPRC 1993). In fact, work values of office consultations should, if anything, be increased to better reflect relative resource use.

New Issues Raised by the Experience with Changes in Payment Policies

As the many policy changes described in this chapter were implemented, new issues have arisen. It has become apparent that the integrity of the fee schedule can be affected by the manner in which policy changes are carried out. Decisions about how to maintain budget neutrality or to implement savings-generating policies have the potential to distort elements of the fee schedule. Efforts to identify sources of budget savings or change Medicare physician payment policy will have to select among alternative strategies for changing the Medicare Fee Schedule, each with its own costs and benefits.

Two basic questions persist. First, should budget cuts and modifications to the fee schedule be made *within* the three components of the fee schedule or *across* them? Second, when across-the-board cuts are made, should relative values or the conversion factor be reduced? While most payment policy debates focused on establishing values for a particular component of the fee schedule (that is, within-component), the three components can be combined only if there is some notion about how the components should relate to one another (that is, across-component). The Medicare Fee Schedule was originally designed so that the

shares of physician revenue then used to pay for work (net income), practice expense, and malpractice expense would be mirrored by the composition of Medicare payments. Assuming that these shares have not changed, the across-component relationships should be preserved.[5] Subsequent policy decisions have had to grapple, with mixed success, with how to resolve within-component problems without disrupting the across-component relationships.

Different budget-cutting and policy-changing strategies can have significantly different impacts on across- and within-component relative values. For example, the overvalued procedure reductions of the late 1980s were based on information about relative work values but were taken, in essence, across all three components. Conversely, recent savings from adjusting overvalued practice expense relative values have been realized solely by reductions in practice expense relative values. Had the overvalued procedure cuts of the late 1980s been made to work values alone, these two policies would have offset one another somewhat. As the changes were actually made, however, practice expenses will account for a smaller share of total Medicare payments than is indicated by the data on physician revenue shares that guided construction of the fee schedule.

In general, the question is whether identification of misvalued services should be used to reshuffle payments across fee schedule components or whether each component's aggregate share should be pegged to actual revenue shares. Policymakers must understand the implications of the different approaches and why one might be more appropriate than another, depending on the situation. When, if ever, is it appropriate to treat the components of the fee schedule differently? The answer to this question affects not only the narrow instances of relative value adjustments, but also informs the process of changing other aspects of physician payment policy.

Principles to Guide Fee Schedule Changes. Ultimately, in making budget and fee schedule changes, policymakers must decide which elements of the schedule should not be changed. The following three principles would best guide decisions on these issues:

- The relative value scale should be usable by all payers.
- Changes in the relative values for individual services should be made only to make resource-based payment more accurate.
- Changes in the relative amounts of the aggregate work, practice expense, and malpractice expense components of the relative value scale should be made only to improve the accuracy of the relationships among them.

The first principle reflects a shift in how the RVS is used. Although it initially was a tool of Medicare, the RVS can be used for fee-for-service payment in general. In fact, this shift is

[5] If the shares have changed—for example, if physicians have reduced practice expenses as a share of revenues—then it would be appropriate to rescale the three components as part of the periodic five-year review.

already occurring. Increasingly, non-Medicare private and public payers are employing the relative value scale to pay providers (see Appendix A). Further, the relative value scale may play a central role under health system reform (see Chapter 4). The Commission has promoted the RVS as an all-patient scale, with the addition of Medicare and pediatric adjusters as mentioned above. HCFA should ensure that the RVS is an all-patient scale and that Medicare and pediatric adjusters are developed if necessary.[6]

The important implication of the first principle is that Medicare-specific policy changes should be made by adjusting Medicare's conversion factors (or other Medicare payment policies) rather than by adjusting relative values. For example, it seems illogical that all relative values were decreased for 1994 because Congress decided to end Medicare's practice of paying new physicians lower rates than others. Other payers presumably were paying the same rates to all physicians all along; to avoid an unnecessary or unjustified cut in payments to physicians, they would have needed to increase their conversion factors by 0.9 percent for 1994. Further, when Medicare discontinued its policy of paying separately for EKG interpretation, it added relative value units to visit codes to reflect the work associated with this service. As a consequence, the relative values for visits were artificially inflated for private payers, distorting the relative value scale. When Medicare reinstated its previous policy with the 1994 fee schedule, the relative values for visits were lowered. It is unlikely that private payers took steps to offset these changes, which were relevant only to Medicare.

As more payers adopt the fee schedule, it may be especially desirable for changes in health plans' conversion factors to reflect only their competitive and financial situations, and not be confounded by shifts in Medicare payment policies that they do not share. Similarly, if the Congress wishes to achieve Medicare program budget savings, it is better for those savings to come from the conversion factor so that there are no direct effects of this on the budgets of other payers.

The second principle—permitting relative value changes only to make resource-based payment more accurate—reflects the Congress's and the Commission's original intention for payment to be resource-based. This is expected to make payment more equitable among physicians and minimize the influence of financial incentives on decisions about which services to provide to a patient. Other policy objectives should not be pursued by altering relative values from their resource basis. In analyzing the Administration's proposed changes to relative values to promote primary care services, the Commission has applied this principle. It has concluded that using Medicare bonus payments would be a more appropriate way to encourage primary care.

[6] This would require completion of work the Commission has recommended in the past, including continued development by HCFA of accurate values for pediatric and obstetric services and the institution of resource-based values for the practice expense and malpractice expense components.

The third principle emphasizes that the relative amounts allocated to work, practice expense, and malpractice expense should reflect the share of physician revenues directed to these components. This allocation should be changed only on good evidence that it is incorrect. As mentioned above, the OBRA93 practice expense relative value reductions, pursued to realize budget savings, reduced the share of total payments allocated to practice expenses.

Applying the Principles. These three principles should govern how four different types of policy changes are implemented, namely, those that adjust the relative values of specific services, those used to introduce new codes or revise existing ones, those employed for changing payment policies, and those applied to systematic revision of a fee schedule component.

Policy changes of the first type occur when relative work values are refined and updated, interim values are corrected, and the entire relative value scale is periodically reviewed. In these cases, relative work values of particular services are found to be incorrect and are fixed (in accordance with the second principle). A budget-neutrality requirement is justified to discipline the process of refining values, which otherwise might be biased toward increasing relative values. More important, since the scale is a relative one, the fact that one service is incorrectly valued means that all others are slightly misvalued.[7] Both misvaluations should be corrected simultaneously so that the relative values are correct. It makes more sense to adjust relative values on the RVS rather than to adjust all the conversion factors used by every payer that bases payment on the RVS. This also would insulate every payer's conversion factor from being influenced by the extraneous process of refining the RVS. Finally, the adjustment should occur within the same component (in accordance with the third principle) to preserve the relationship among components of the RVS. This same process applies regardless of whether the initial correction is an increase or decrease.

OBRA93's correction of overvalued practice expense relative values of certain services was implemented contrary to these principles. Ideally, the excess relative value units that were identified should have been redistributed to the practice expense components of other services. This would have corrected the previous slight undervaluing of those other services and preserved the relationship among the components of the RVS. If the practice expense values had already been resource-based, the appropriate approach would have been more obvious. To achieve the budget savings that motivated the provision, the Medicare conversion factor should have been lowered by the corresponding amount. This would have required a reduction of more than 2 percent in the conversion factor.

The second type of policy change occurs when a new code is established or existing codes are revised. In this instance, there is no problem with existing code values; relative values simply need to be calibrated for the new and revised codes. The yearly update process in which

[7] This is because the relative value units within each component were originally scaled to match the revenue share of that component.

values are assigned for new and revised codes illustrates this kind of change. The analysis is slightly different for entirely new codes and services than for existing codes that are being revised.

For code revisions, HCFA now follows a policy of making the changes budget neutral within groups of related services. A special case is dividing a single code into different ones, which HCFA is doing on a budget-neutral basis for the resulting codes. This approach to code revisions seems appropriate. Because it assumes that the values of the original codes were correct, the task is simply one of allocating the aggregate work previously associated with the original code among the revised codes. The result is that only related codes are affected, and the relationships among the components of the RVS remain unchanged. If, however, the revisions changed aggregate relative value units, some distortions in relationships among groups of services might be introduced. These would need to be addressed in the five-year periodic review of the entire relative value scale.

Requiring budget neutrality in the revision process should help maintain some discipline and avoid relative value inflation over time. If the RVS is to be used by many payers, the adjustments needed to make budget-neutral changes to relative values should be based on service volumes for all patients, not just for Medicare's. Each payer, including Medicare, can change its conversion factor if the RVS adjustments differ from those that would obtain for their particular patient volumes. A national data strategy would provide the necessary all-payer data, although reasonable substitutes are available in the interim (see Chapter 16).

When new codes are established for entirely new services, a budget-neutrality requirement disciplines the process of assigning new values in general and ensures that Medicare complies with budgetary rules. But the additional expenditures attributable to an entirely new service should be minor if its code is created before the service is widely used. Since the service often will have been billed under another code, it is possible to calculate expenditures associated with the service. A budget-neutral adjustment may not be necessary because any projected spending increase is likely to fall within the $20 million allowance accorded Medicare by OBRA89. The ensuing diffusion of the service would then be reflected in future years in the conversion factor updates determined by the Volume Performance Standard for Medicare and by whatever budgeting mechanisms other payers use.

The first principle implies that particular payment policy changes specific to Medicare (including coverage decisions) should not be accomplished by adjusting the relative values. The restoration of separate payment for EKG interpretation and the elimination of the new physician payment differential exemplify policy changes that should have been made budget neutral by changing the Medicare conversion factor rather than the relative value scale.

These principles suggest that, when a fee schedule component is redefined, budget neutrality should be achieved in such a way that the other two components and the distribution across the three components are unaffected. The Commission believes that resource-based practice expense relative values should be implemented in this manner.

RELATIVE PAYMENT RATE CHANGES UNDER THE MEDICARE FEE SCHEDULE SINCE 1992

In its 1992 annual report, the Commission included an analysis of the relative payment rate changes that would occur when Medicare physician payment reform was fully implemented (PPRC 1992). The analysis was based on the 1992 relative value scale and the payment policies described in OBRA89. Those estimates indicated that, as payment is shifted from its previous charge basis to the fee schedule, relative payment for EM would increase by 31 percent and that for surgical global services would decline by about 30 percent.

Since then, the RVS has been refined and additional changes in policy have been enacted, some of which will profoundly influence the pattern of relative payments. Under the current VPS process, for example, the conversion factor for primary care services is likely to increase relative to that for surgical services and that for all other services. As a result, the gains for evaluation and management services other than primary care, such as hospital visits and consultations, originally expected under payment reform will be eroded. The Administration's proposal to increase the performance standard for primary care under the VPS relative to the other two would exaggerate these changes. This section analyzes how the structure of payment rates has been affected by relative value changes since 1992, by implementation of OBRA93 practice expense reductions, and by separate updates for the three VPS categories.

The following analysis is based on estimates of payment rates under different policy changes since 1992. To make the estimates comparable, each policy change is modeled in a budget-neutral manner, with payment rates based on the 1992 conversion factor. Volumes are held constant at 1991 levels to insulate estimates of payment changes by service family and specialty from changes in volume that may result from service-level payment rate changes. The starting point for the analysis is the payment levels that would have occurred in 1996 under a fully implemented fee schedule based on 1992 relative values, referred to here as the 1992 RVS estimates. The first comparison is with estimates based on the 1994 RVS. The only differences between the 1992 RVS and 1994 RVS estimates are relative value refinements and the site-of-service reduction to practice expense payments for selected services. The OBRA93 reductions to practice expense relative values are then applied to the 1994 RVS estimate to isolate the marginal effect of that policy once it is fully phased in by 1996. These are referred to as the OBRA93 estimates. These two changes reflect efforts to make relative

payment rates more accurate. The resulting estimates can be interpreted, therefore, as indicative of improvements in the relative value scale.[8]

The other major policy change modeled is the implementation of the three VPS updates. With the three VPS categories treated separately but assigned the same performance standard, their updates will likely differ due to trends in medical practice. Specifically, nonsurgical service volume is growing much more rapidly than that of surgical procedures or primary care. By establishing three different update groups but a single target growth rate, the relatively higher growth trend for nonsurgical, nonprimary care services will consistently lead to relatively low updates for these services.

To capture the impact of the differential updates over time, they are cumulated through 1996 and through the year 2000, and are applied to the OBRA93 estimates. The resulting estimates, called VPS 1996 and VPS 2000, reflect budget-neutral implementation of the differential updates, and are thus comparable to payment rates under the scenarios described above. Finally, because the Administration's proposal includes a specific revision to the VPS to promote primary care, Administration estimates are created to reflect the impact of these differential updates by 2000 (see Chapter 21). These estimates help illustrate how different update paths would affect relative payment rates across service families and specialties.

As suggested by payments for a few selected services, these various policies will affect relative payment significantly (Table 20-1). The policy changes aimed at improving the accuracy of relative payments—1994 RVS and OBRA93—would have reduced the relative payment for total hip replacement by nearly 13 percent in 1996. Under current VPS policy, however, the differential updates will restore most of this reduction by 1996 and virtually all of it by 2000. Primary care services also realize gains under the differential update policy. Payment for an office visit with an established patient will be $32, or 7 percent more than was anticipated under the original 1992 RVS estimates.

To maintain budget neutrality, these gains for surgical and primary care services are offset by losses for other services. Payment for upper gastrointestinal endoscopies and hospital visits are illustrative. Payment for these services will fall between 1996 and 2000 solely because of current VPS policy. Under the 1992 RVS estimates, payment for an endoscopy was about 6.9 times that for an office visit. This ratio was reduced to 6.0 by refinements made to the fee schedule and implementation of the OBRA93 provisions. Because these changes are consistent with improving the resource basis of the fee schedule, this reduction in relative payment from the 1992 RVS may be appropriate. The differences in the update factors that apply to these two services lower the ratio of payment to about 4.7 by the year 2000, however.

[8] Although the Commission's research on practice expense relative values cannot be interpreted as identifying savings as occurred under OBRA93, it finds that the resulting changes in practice expense relative values are consistent with resource-based estimates.

Table 20-1. Simulated Payment Rates for Selected Services under Recent Payment Policy (1992 dollars)

	1992 Relative Value Scale[a]	1994 Relative Value Scale[b]	OBRA93[c]	Volume Performance Standard 1996[d]	Volume Performance Standard 2000[e]	Administration 2000[f]
Hip Replacement	1,697	1,628	1,479	1,622	1,686	1,659
Upper Gastrointestinal Endoscopy	207	199	180	170	163	160
Office Visit, Established Patient, Level 3						
Physician office	30	30	30	32	35	37
Outpatient clinic	24	24	24	26	28	30
Subsequent Hospital Visit, Level 2	42	43	43	41	39	38

SOURCE: Physician Payment Review Commission simulations using 1991 Medicare claims, 100 percent summary file, and published fee schedules.

[a] Baseline payment rate estimates for 1996 under a fully implemented fee schedule of the 1992 relative value scale (RVS).

[b] Payment rate estimates for 1996 with relative value refinements and site-of-service reductions.

[c] 1994 RVS estimates plus OBRA93 practice expense relative value reductions.

[d] OBRA93 estimates plus volume performance standard (VPS) updates through 1996.

[e] OBRA93 estimates plus VPS updates through 2000.

[f] OBRA93 estimates plus VPS updates described in the Administration's proposal through 2000.

NOTE: All estimates are based on the 1992 conversion factor and are budget neutral to the baseline 1992 RVS estimates.

Similarly, based on the RVS after relative value refinements and OBRA93, payment for a hospital visit should be about 28 percent more than for an office visit; by 2000, the cumulated updates will have reduced this to an 11 percent difference.

The combination of RVS refinement, OBRA93, and differential updates through 1996 will boost relative payment for primary care services by 8 percent compared to the 1992 RVS (Table 20-2). Because these estimates are based on 1991 volumes and the 1992 RVS, they are, in essence, adjustments to the Commission's earlier analysis of the relative changes expected when the fee schedule is fully implemented. That analysis indicated a 31 percent gain for all EM services. This earlier estimate, combined with the 8 percent gain now expected under current VPS policy, suggests that the relative payment rate for primary care services will be more than 40 percent higher than was the case under charge-based payment. The expected losses for surgical services, originally estimated to be 30 percent under the

Table 20-2. Estimated Changes from 1992 Medicare Fee Schedue Rates under Recent Payment Policies (percentage)

	1994 Relative Value Scale[a]	OBRA93[b]	Volume Performance Standard 1996[c]	Volume Performance Standard 2000[d]	Administration 2000[e]
Service Family					
Primary care	2.7	4.7	8.0	16.1	23.4
Other evaluation and management	1.0	2.9	-4.9	-10.5	-12.7
Surgery	-2.2	-5.0	4.0	6.1	3.7
Other	-0.8	-1.2	-8.6	-14.0	-16.2
Physician Specialty					
Cardiology	1.7	0.2	-4.6	-7.3	-8.1
Family/general practice	2.0	3.5	3.6	6.8	10.3
Gastroenterology	-0.8	-1.2	-7.7	-11.3	-12.5
Internal medicine	1.8	2.9	-0.2	-0.2	1.4
Other medical	1.7	3.5	-2.9	-6.8	-8.0
General surgery	-0.4	1.0	6.8	8.1	6.7
Dermatology	0.0	1.9	9.7	12.6	12.6
Ophthalmology	-2.0	-9.9	-6.3	-5.8	-7.0
Orthopedic surgery	-3.2	-4.1	1.9	3.4	2.2
Thoracic surgery	-0.6	1.0	9.3	10.8	8.6
Urology	-1.9	-0.3	5.9	8.1	7.3
Other surgical	-1.0	-0.5	4.7	6.9	6.9
Radiology	-3.1	-1.2	-8.6	-13.9	-16.0
Other[c]	0.7	1.5	1.6	2.0	2.4

SOURCE: Physician Payment Review Commission simulations using 1991 Medicare claims, 100 percent summary file, and published fee schedules.

[a] Payment rate estimates for 1996 with relative value refinements and site-of-service reductions.

[b] 1994 RVS estimates plus OBRA93 practice expense relative value reductions.

[c] OBRA93 estimates plus volume performance standard (VPS) updates through 1996.

[d] OBRA93 estimates plus VPS updates through 2000.

[e] OBRA93 estimates plus VPS updates described in the Administration's proposal through 2000.

NOTES: Payment change is measured in relation to baseline payment estimates for 1996 under a fully implemented fee schedule based on the 1992 RVS estimates. Anesthesia and pathology services were not included in the analysis.

1992 RVS, will be several percentage points less because of the 4 percent relative gain for these services, compared with 1992 RVS estimates. Combined, the current and previous estimates suggest that relative payment for surgical services will be about 27 percent lower under the fee schedule than that expected under the previous charge-based payment policy. Conversely, because other EM services receive a lower update than primary care services, they will lose about 5 percent of expected 1992 RVS payments by 1996 and 11 percent by

2000. These reductions will significantly erode the 31 percent gain originally predicted for these services under payment reform. The Administration's proposed revision to the Medicare Volume Performance Standards would exacerbate the relative changes that are expected under current policy.

In general, neither changes to the relative value scale nor implementation of the OBRA93 reductions affect relative payment rates as much as the differential updates. A notable exception is services performed by ophthalmologists, who lost almost 8 percent in relative payment as a result of OBRA93.

This analysis reinforces concern about the long-term impact of differential updates on the structure of relative payments. The cumulative effect of differential updates is significant and will distort relative payments from their resource basis. The Commission therefore reiterates its recommendation that differential updates resulting from current VPS policy apply for one year only.

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CHAPTER 21

ENHANCING MEDICARE VOLUME PERFORMANCE STANDARDS

Constraining growth in the volume of services remains one of the most important goals of Medicare cost-containment policy. Payment rate updates and increases in volume both contribute to the growth in Medicare outlays per beneficiary. In recent years, however, volume has been by far the principal factor driving up expenditures for physicians' services. From 1986 to 1993, payment rates increased just under 4 percent while volume of services per beneficiary grew roughly 50 percent.

The Volume Performance Standard (VPS) system has been the Medicare program's principal tool for moderating the growth in service volume. The VPS sets an annual volume target through congressional action or, if the Congress does not act, through a default formula. The difference between this target and actual volume partly determines future physician payment rate updates, with low volume growth rewarded by higher updates. This linkage between volume and fees tends to stabilize outlay growth and make budgets more predictable, and gives the physician community a collective incentive to develop tools and methods for constraining increases in volume.

This chapter examines two areas where changes have been proposed in Medicare's approach to addressing volume growth: modifying the VPS process and introducing volume standards for hospital medical staffs. Changes in both these areas were proposed in the Medicare budget savings portion of the Administration's health system reform proposal.

Three major changes were proposed for the VPS process. First, the default allowance for volume growth would be reduced from its current level, which is based on historical volume trends (less a specified percentage), to the trend rate of growth in gross domestic product (GDP).[1] Second, the current default formula, which considers one year's spending at a time, would be changed to a cumulative formula based on total spending over several years. Finally, the existing limit on the amount by which fees could be reduced below the Medicare Economic Index (MEI) would be removed.[2]

All of these proposed changes would improve the VPS in a technical sense. They would narrow the gap between actual and targeted outlays, making the VPS a better tool for

[1] A separate 1.5 percent add-on would cushion the reduction for primary care services only.

[2] The MEI measures inflation in the cost of the inputs to physicians' practices, such as rents, supplies, and professional wages.

controlling the Medicare budget. In addition, they would prevent high or low volume growth from eventually affecting the targets. This enhances the long-run incentive for the physician community to act to constrain volume growth.

The more important point, however, is that each of the proposed changes in the VPS would reduce the targets, increasing the risk of sharp fee reductions and potentially threatening access to care. With appropriate modifications, the technical improvements embodied in these proposals could be incorporated into the VPS without the significant tightening of the standards that the proposals would entail.

RECOMMENDATIONS

The method for incorporating the volume and intensity factor into the Volume Performance Standard default formula should be changed. The use of historical trends in volume and intensity should be replaced by a formula linked to real gross domestic product per capita. This change in method should be implemented in a budget-neutral manner. There should be no additional allowance for primary care as proposed by the Administration.

The current Volume Performance Standard process should be replaced with a cumulative VPS. A single year's comparison between actual and targeted spending would no longer be used to set fee updates. Instead, fee updates would be based on a comparison of actual versus targeted spending cumulated over all years following some base year. This should be pursued, however, only if no further tightening of the performance standards occurs. In particular, this policy should not be pursued if the pure per capita GDP-based volume and intensity allowance contained in the Administration's health reform proposal is adopted.

Limits on the reductions in the maximum update from the Medicare Economic Index should not be removed, but the current limit of 5.0 percentage points should be made symmetric by applying equally to updates in excess of the MEI as well as those less than the MEI.

In addition to these changes in the VPS process, the Administration has proposed a form of volume standards for medical staffs of individual hospitals. For "high-cost hospital medical staffs," 15 percent of payment for physicians' inpatient services would be withheld. Some or all of this withhold would be returned if volume and intensity of care per admission declined sufficiently.

This is a novel approach to addressing the issues of practice pattern variation and volume growth. Its inherent disadvantages, however, outweigh its potential advantages. It would introduce physician profiling in a punitive context, concentrating significant payment reductions on just a

fraction of physicians' services. It has the potential to create undesirable changes in physician behavior and to increase the cost and complexity of administering the Medicare program.

The Health Care Financing Administration (HCFA) is already beginning to move its profiling efforts away from formula-driven utilization review toward much more refined approaches to analyzing regional variations in service use and addressing specific quality and cost problems. An accelerated expansion of these efforts would be a more reasonable way to approach the issue of variations in practice patterns.

RECOMMENDATIONS

The high cost medical staff proposal contained in the Administration's health care reform proposal should not be enacted into law.

The Health Care Financing Administration should build on its current efforts that use profiling for educational and quality assurance purposes rather than using profiling to set payment rates. HCFA should consider ways to make profiling information more readily available to hospitals and physician organizations.

PROPOSED CHANGES TO THE VOLUME PERFORMANCE STANDARDS

The Administration has proposed three significant modifications to the VPS default formulas. These include changing the default volume and intensity (V/I) allowance, cumulating the VPS over several years, and eliminating the limit on the size of fee reductions in any one year.

Consideration of these proposals weighs technical improvements in the VPS process against the potential to disrupt access to care. Each of the proposed changes would improve the VPS process by strengthening the linkage between volume growth and fee updates. On the other hand, these changes would reduce payment rate updates relative to current law, possibly reducing physicians' willingness to treat Medicare beneficiaries.

The size of these payment reductions suggests that the proposed changes should be modified. Medicare beneficiaries currently enjoy relatively good access to care (see Chapter 17). But that access occurs in an environment where Medicare payment rates average about 59 percent of private payer rates, having declined from more than 70 percent of private rates in the late 1980s. Commission simulations suggest that under a worst-case scenario, by the year 2000 Medicare payment rates would decline to 43 percent of private-payer rates under the proposed changes (see Chapter 19).[3]

[3] The worst-case scenario combines high Medicare volume growth with high private-payer payment rate increases.

Default Volume Allowance

Under the current VPS system, the default formula contains an allowance for future volume growth that is based on volume growth in the recent past. In any given year, the allowance for volume and intensity (V/I) growth is based on the average V/I growth during the preceding five years, less a performance standard factor. The performance standard factor is 4 percentage points for 1995 and subsequent years, so that the default formula now allows for a volume increase that is 4 percentage points less than the recent historical norm.

The use of historical volume growth in setting the target diminishes the collective incentive for the physician community to work to constrain volume increases. High or low expenditure growth eventually becomes part of the trend that determines the V/I factor. With this system, a reduction in volume growth nets an increase in fees, but only at the expense of lower performance standards in the future. In effect, the system offers only a temporary reward for a permanent reduction in volume.

The proposed revision of the formula would break the linkage between the V/I allowance and historical volume growth. It would base the allowance for V/I for all nonprimary care services on the average rate of growth in real GDP per capita over the last five years, with an additional 1.5 percentage points for primary care services.

The move to a volume and intensity factor based on an external factor such as GDP is clearly an improvement from the standpoint of incentives to control volume growth. In contrast to the current VPS, a downward trend in volume growth would not result in lower default targets. This offers the physician community the promise of a long-term reward for any permanent reduction in volume growth.

The proposed change would lead to much lower performance standards than would occur under current law. The Medicare actuaries project V/I growth of 7.5 percent to 8 percent per year between 1996 and 2000, and they project GDP growth of 1.5 percent per year (London 1993). This would make the current default V/I allowance (trend in V/I less 4 percent) roughly 2 percent to 2.5 percent higher than projected growth in real per capita GDP. The Medicare actuaries estimate that this provision would reduce Medicare expenditures by $3.9 billion between 1996 and 2000.

Cumulative Performance Standards

Under the current VPS, the comparison between target and actual volume growth is always done one year at a time. For example, 1994 volume growth will be compared with the 1994 standard to determine the fee update for 1996, and 1995 volume growth will be compared with the 1995 standard to determine the update for 1997.

This system keeps annual spending near the budget-neutral baseline in the long run, but in effect forgives temporary deviations from that baseline. This occurs in part because excess spending in a given year is not recaptured, and also in part because high spending in one year provides a higher base for calculating the subsequent year's target.

A numerical example illustrates the effect of the lack of recapturing excess spending and the rebasing of the annual targets (Table 21-1). For simplicity, this example assumes that total spending in the base year is $100, the MEI is zero, and the target for volume growth is 5 percent per year. In the baseline scenario (Case 1) spending equals the standard each year and the total standards and total spending over the three years match the planned 5 percent annual growth rate. Excess spending of $2 in the first year (Case 2) raises total spending by $4 and raises standards by $2. Similarly, a $2 reduction in spending during the first year (Case 3) lowers total spending by $4 and total standards by $2. All cases result in virtually the same VPS target in the third year, demonstrating that the formula returns annual spending to the budget-neutral baseline in the long run.

Table 21-1. Example of the Effects of Rebasing the Volume Performance Standards

	Expenditures				Total Increase from Year 0
	Year 0	Year 1	Year 2	Year 3	
Case 1: Standard Met in all Years					
VPS expenditure levels	100.0	105.0	110.3	115.8	31.1
Actual expenditures	100.0	105.0	110.3	115.8	31.1
Case 2: Actual Expenditures Greater than Standard in Year 1					
VPS expenditure levels	100.0	105.0	112.4	115.7[a]	33.1
Actual expenditures	100.0	107.0	112.4	115.7	35.1
Case 3: Actual Expenditures Less than Standard in Year 1					
VPS expenditure levels	100.0	105.0	108.2	115.9[b]	29.1
Actual expenditures	100.0	103.0	108.2	115.9	27.1

[a] Incorporates an update reduction for exceeding the Year 1 performance standard.

[b] Incorporates an update bonus for not exceeding the Year 1 performance standard.

The Administration's proposal would replace this one-year-at-a-time approach with cumulative standards. Rather than rebasing the standards each year, a base year would be chosen. In any given year, the standard would specify the total outlays that should have occurred since the base year. Fee updates would depend on the comparison between actual

and targeted spending over the entire period. There would be no forgiveness of temporary deviations, and any surplus or shortfall in spending would be accounted for fully.

The Medicare actuaries have estimated that this provision will yield $5 billion in savings between 1996 and 2000. These savings, however, are based largely on an assumption that expenditures will always exceed the amount specified by the performance standards. On the other hand, savings would be minimal if the years where expenditures were above target were balanced by years where expenditures were below target. Finally, if spending is typically below target then this provision would actually increase Medicare expenditures.

The $5 billion in projected savings from the cumulative VPS proposal reflects an interaction with the proposed reduction in the default volume allowance. Historically, physicians have exceeded targets in some years and beaten them in others. That historical record was achieved under targets that were less stringent than those now in place, and are much less strict than those being proposed.[4] The Administration's proposal to reduce the default volume allowance increases the likelihood that the standards will always be exceeded, and so raises the total savings to be gained from switching to a cumulative VPS.

Maximum Update Reduction

Under the recently enacted provisions of the Omnibus Budget Reconciliation Act of 1993 (OBRA93), the default fee update protects physicians against extremely large fee reductions. Starting in 1995, fees can be reduced no more than 5 percentage points below the MEI in any one year, regardless of the amount by which actual expenditure growth exceeds the target.[5] There is no limit, however, on how much updates can exceed the MEI.

The Administration's proposal calls for elimination of the maximum reduction limit. This would mean that the default payment rate updates would no longer be insulated from very large increases in volume, making the updates equally subject to the effects of expenditure growth that exceeded or was less than the performance standard amount. The effect of this change would be to strengthen the VPS as a budgetary tool and to reinforce the incentives to the physician community to control volume.

Discussion

The Commission considered two goals when evaluating the proposed changes in the VPS. First, the proposed changes should strengthen the VPS both as a budgetary mechanism and as a way to give the physician community incentives to reduce volume growth. Second, these changes should

[4] The performance standard factor began at 1.5 percent, is 4 percent under current law, and would rise to what is effectively 6 percent to 6.5 percent in the proposed revision. The miscalibration of the 1992 fee schedule conversion factor (PPRC 1993) also helped to keep total spending growth below target.

[5] Prior to OBRA93, the maximum had been set at 3 percentage points for 1996 and beyond.

not make the performance standards too stringent, leading to sharp reductions in payment rates. Further reductions might have significant long-term consequences for access to care.

For the proposal to set the default volume and intensity allowance equal to real per capita GDP, a fundamental consideration is whether per capita GDP growth is the appropriate factor on which to base the allowable rate of growth in Medicare physician expenditures. Over the years, the Commission's VPS recommendations have been based on a goal of reducing the rate of growth in Medicare physician expenditures to that of per capita GDP by 1996. This goal and the recommendations resulting from it were based upon the notions of affordability and reasonableness. Affordability was judged by the share of societal income spent on the provision of health care. Reasonableness was judged by how much physicians could be feasibly expected to reduce volume growth in a particular year.

The Commission believes that a pure real per capita GDP-based volume and intensity allowance would be too restrictive. When the Commission made its first VPS recommendations, the difference between projected real per capita GDP growth and historical per beneficiary V/I growth was smaller than it is today. In addition, changes in the practice of medicine suggest that physicians' services might be allowed a somewhat higher growth rate. The ongoing shift from inpatient to outpatient settings, for example, effectively substitutes physicians' services for those delivered by other providers such as hospital medical personnel.

Further, unless the current fee-for-service system can change dramatically, setting the volume and intensity allowance equal to per capital real GDP growth may result in a significant deterioration of Medicare beneficiaries' access to care. A pure GDP-based allowance would result in a typical V/I allowance of perhaps 1.5 percentage points, far lower than historical rates of growth. The most likely result, therefore, would be continual reductions in the updates, and an increasing erosion of Medicare payment rates relative to those of other payers. Sufficiently low fee levels could seriously reduce Medicare beneficiaries' access to mainstream health care.

The Commission believes that a more appropriate default volume and intensity allowance would be based on the growth of real per capita GDP plus an additional factor. Ideally, this additional amount would account for growth in new medical technologies, changes in access and affordability, and other relevant considerations. Currently, however, there is no way to quantify these components with any precision. Given this limitation, a reasonable approach would be to maintain a rate of expenditure growth that would be budget neutral relative to current law. On the basis of recent trends, the Commission estimates that this additional factor should be about 2 percentage points.

It does not appear necessary to provide an additional 1.5 percentage point V/I allowance for primary care services with this recommendation. Past and present concerns about the relative underprovision of primary care services have resulted in a number of changes favoring these services. First, the Medicare Fee Schedule will redistribute relative payments away from procedures toward primary care and other evaluation and management services. Second, primary care services now have a separate VPS, and payment rate updates are likely to be

higher for these services due to their relatively slow growth.[6] Commission simulations suggest that these factors will increase payment rates for primary care by 47 percent from 1991 to the year 2000, a bigger boost than the 31 percent increase based on the original relative value scale (see Chapter 20). Finally, relative payments for primary care services would be substantially increased if resource-based practice expenses were adopted (PPRC 1992b). In light of these changes, there appears to be no need to treat primary care services more favorably than other services in the VPS.

Establishing cumulative performance standards and removing the limit on update reductions would probably result in lower updates than would occur under current law. If physicians were able to meet the standards on average, these proposed changes would have little net effect on payment updates. With stringent targets, and particularly with a default V/I allowance equal to real per capita GDP growth, expenditures would be likely to exceed the targets in most years. In that case, these two provisions would result in larger update reductions than under current law.

Although it supports establishing a cumulative VPS, the Commission is concerned about the method that will be used to actually set the performance standards. As described in the Administration's proposal, it is possible that the rate of growth in expenditures would affect both payment rate updates and future performance standards. This implies that in years where expenditures grew faster than the performance standard rate, physicians would be penalized twice. Discussions with the Medicare Actuaries, however, indicate that this problem will not exist. Instead, only changes in law and regulation determined outside of the VPS system would be factored into the performance standards. Even so, care must be taken to avoid this possibility.

In testimony before the Congress in 1993, the Commission favored making the update reduction limits symmetric—applying equally to how much updates can exceed or go below the MEI. At that time, however, the Commission advised against eliminating these limits. Even though over the long run expenditures increase at a relatively stable rate, growth varies considerably from year to year.[7] Elimination of these bounds could make payment updates fluctuate widely. The Commission has found no good reason to alter this position.

HIGH COST-MEDICAL STAFFS

Ever since the passage of Medicare physician payment reform in 1989, the Commission has sought sound and feasible ways to establish volume standards for smaller and more cohesive

[6] Between 1986 and 1991, per beneficiary volume for primary care services grew at an annual average rate of 5.3 percent. In contrast, per beneficiary volume for other nonsurgical and surgical services grew at 8.9 percent and 6.7 percent, respectively.

[7] For example, expenditure growth in the years 1984, 1985, and 1986 was 11.7 percent, 4.2 percent, and 10.3 percent, respectively. Similarly, for 1988, 1989, and 1990, expenditure growth was 10.5 percent, 6.7 percent, and 10.8 percent, respectively (Board of Trustees 1992).

groups of physicians. In its 1990 report to the Congress, the Commission recommended against setting a VPS for individual physician groups, narrow categories of service, or individual physician specialties, but suggested further study of separate standards for states (PPRC 1990). In its 1993 report, the Commission went further and recommended giving HCFA authority to establish a demonstration of a state VPS (PPRC 1993).

The Administration's proposal contains a provision creating targets for the volume of physicians' services per hospital admission. Hospital staffs that exceeded these targets would be designated Medicare "high-cost hospital medical staffs." In these hospitals, 15 percent of payment would be withheld for physicians' services furnished to inpatients. The withheld funds would be returned if volume per hospital admission declined sufficiently.

This proposal potentially offers Medicare several significant advantages. It would produce $2.2 billion in savings over the years 1998 to 2000. It would also target small and reasonably cohesive groups of physicians, comparing them based on an output measure, diagnosis related groups (DRGs), that has been tested for hospital reimbursement. In addition, this would give some hospital staffs financial incentives to examine their practice patterns and, to the extent that high use reflects inappropriate care, could result in a more equitable distribution of Medicare revenues.

The provision's disadvantages, however, outweigh its advantages. It focuses very large payment reductions on a small minority of providers and services. This is a questionable way either to generate Medicare savings or to encourage the use of profiling of practice patterns. Further, it may have unintended effects on physician behavior, including a shifting of admissions away from hospitals with the high-cost designation. The provision would also increase the cost and complexity administering of the Medicare program. Finally, even if there were no other problems, the payment formula itself needs considerable refinement. Many significant determinants of volume per case are omitted and the formula introduces a large discrepancy in payments between nearly identical providers. Additionally, because it ignores all regional variation, the provision would have major impacts in certain cities or states.

Description of the Provision

The high-cost medical staffs provision is quite complex. This section provides a brief description of the major parts of the provision.

Calculation of Volume per Admission. The first step in the high-cost medical staff process is the calculation of volume per admission for each hospital in the country. The following discussion outlines that process.

First, physicians' services volume per admission would be calculated for each hospital. Professional services (Part B) bills would be used to calculate the total volume of care in each hospital. Volume would be measured by summing the relative value units (RVUs) for all

physicians' services provided to hospital inpatients. Hospital facility (Part A) bills would be used to count the total number of admissions in that hospital. Volume per admission would then be calculated as inpatient services volume divided by total admissions.

Volume per admission would be adjusted in a number of ways. First, each hospital's volume per admission would be adjusted for the hospital's DRG mix. This would account for differences in the mix of cases across hospitals.

Next, intern and resident labor would be factored into this calculation. Interns and residents do not submit Part B bills. Instead, Medicare pays for their services through the direct and indirect medical education payments made under Part A. The Part B bills, therefore, would understate RVUs per admission and total Medicare payments for professional services in hospitals where intern and resident labor substitutes for that of private physicians. Information on the number of interns and residents would be used to adjust the hospital's volume per admission.

Two more adjustments would be made before identifying the high-cost medical staff hospitals. As was done under PPS, allowances would be made for teaching and disproportionate share status. In effect, this would compare hospitals within separate peer groups. For example, if teaching hospitals averaged 10 percent more RVUs per admission, then the RVUs per admission for each teaching hospital would be adjusted downward by 10 percent before any comparison was made between teaching and nonteaching hospitals.

Identification, Notification, Withhold, and Repayment. The process of identification, notification, withhold, and repayment would take place over four years, one year more than is the case under the current VPS process.

HCFA would use data on the volume of care delivered in 1996 to identify high-cost medical staffs. Separate thresholds for volume of services per admission would be calculated for urban and rural hospitals. The threshold for urban hospitals would be 125 percent of the median for urban hospitals (falling to 120 percent of median after 1999). The cutoff for rural hospitals would be 140 percent of the median volume per admission for rural hospitals.[8] Hospital medical staffs above the threshold would be designated high-cost hospitals.

In 1997, HCFA would notify the medical executive committee of each hospital about whether that hospital had been designated as a high-cost medical staff hospital. In theory, this early notification would give the hospital medical executive committee time to examine the medical staff's practices and reduce the volume of care per admission. The provision does not call for Medicare carriers to provide information or profiles to hospitals, however. Nor is

[8] Throughout this discussion, only the first year of operation is discussed. Another set of high-cost medical staff hospitals would be identified in 1997, yet another in 1998, and so on.

there any requirement that Medicare modify its existing physician profiling mandate to accommodate this new provision.

In 1998, Medicare carriers would withhold 15 percent of payment for physicians' services delivered to inpatients of these hospitals. The withheld funds would be returned in 1999, based on actual service use during 1998. If 1998 volume were at or below the thresholds, the full 15 percent would be returned. Partial refunds would be made if volume per admission exceeded the thresholds by less than 15 percent. Refunds would include interest.

The refund would be made to a fiduciary agent identified by the hospital's medical executive committee. The funds might be disbursed by the fiduciary to the medical staff in any manner the medical staff sees fit. Alternatively, the fiduciary may ask Medicare to return the withheld funds directly to the physicians.

Advantages of the High-cost Medical Staff Provision

This provision could offer several advantages to the Medicare program, both in terms of cost savings and in terms of furthering the development of controls on volume growth. First, it is estimated to save Medicare $2.2 billion over the three years 1998 to 2000. These savings add to the funds sought by the Administration to finance reform of the health care system.

Second, the provision might help to enhance current Medicare policies to control volume growth by targeting smaller groups of physicians. Under the national VPS, a collective incentive is placed on all U.S. physicians, but there are few organized national groups that can directly influence physicians' practices. Hospital medical staffs, by contrast, are smaller groups where the potential for peer pressure is significantly greater.

Third, if successful, the provision would encourage hospital medical staffs to examine their practice patterns. Hospitals would be penalized for deviations above average service use. This should prompt some hospitals to begin collecting and analyzing the data that would allow them to identify the causes of their high use of services. Although there are no provisions for Medicare to provide detailed data to hospitals, this provision might create pressure for Medicare to generate such profiles and provide them to hospitals. In any event, the provision would certainly increase the financial penalties for high use of services, and may change practice patterns in ways that would make health care delivery more efficient.

Finally, if service use by high-cost medical staffs reflects waste, then this provision has some element of equity in it. Given the significant restraints on Medicare fees and expenditure growth, it seems inequitable that efficient physicians should face both low fees and low volume of care, while inefficient physicians obtain higher Medicare revenues through higher volume of care. Under this provision, the financial rewards to high users of inpatient services would be significantly reduced.

Disadvantages and Potential Modifications

This section discusses some disadvantages of this provision. Some problems appear inherent in the approach and probably cannot be eliminated from any provision of this type. These include targeting large payment reductions on only a small fraction of physician services, introducing profiling in a punitive context, potentially causing undesirable changes in physician behavior, and increasing the cost and complexity of administering the Medicare program.

Because of the inherent problems with this approach, the Commission recommends against adoption of the high-cost medical staffs provision. The Commission recognizes, however, that the need for budget savings might lead to the implementation of this or some similar provision, despite the drawbacks. For this reason, several more technical problems with the payment formula are also addressed, along with options for correcting them.

Targeting Payment Reduction on Outliers. The approach of targeting only those hospital staffs whose volume per admission exceeds a threshold means that payment reductions affect only a small fraction of providers or services. In this case, the withhold would affect perhaps one-fifth of the nation's hospital staffs or services covering perhaps 6 percent to 7 percent of all spending for Medicare physicians' services.

Focusing on just a small set of providers or services has two inherent drawbacks. On the one hand, payment penalties must be quite large to produce significant Medicare savings. Given that the payment formula itself is not sufficiently refined, this raises the issue of significant inequity for those few providers exceeding the threshold, and raises the potential for legal action. On the other hand, the great majority of providers face no incentives from this provision, limiting any impact on actual service delivery.

Encourage Profiling. A significant rationale in the underlying research on which this provision was based was to encourage physicians to profile and examine their practice patterns (Welch and Miller 1993). As a profiling policy, however, this provision has many drawbacks.

First, there is no provision for Medicare to provide hospitals with profiling or utilization information. This clearly raises concerns about the ability of hospital staffs to respond to the payment cuts. Hospitals now capable of producing detailed information on staff practice patterns probably do this, because they have strong incentives to contain facility costs and nearly all activity by physicians raises those costs. Hospitals that are incapable of producing such information clearly would need help from Medicare in this area.

Second, the provision would introduce profiling as a punitive device, rather than as an educational or quality control tool. Prior Commission work on profiling has stressed the need for convening groups of physicians and encouraging feedback regarding profiles and service

delivery (PPRC 1992b). This provision, by contrast, would simply target for payment reductions all medical staffs providing a high volume of services. No consideration would be given to hospital staffs that might provide inappropriately few services, and there would be no feedback or dialogue among payers and providers on the efficacy of the approach. This is particularly important given the relatively unrefined state of the adjustments that determine high-cost medical staff status (see below).

Impact on Physician Behavior. Whereas the provision intends to improve practice by examining practice patterns, physicians might react to it in any of several undesirable ways.

First, they might simply switch hospitals. This would allow physicians to avoid not only the withholding of payments, but also the peer scrutiny that the withhold should create. If significant numbers of physicians switch hospitals, ongoing operations in hospitals designated as high cost could be disrupted. If referral centers or tertiary care hospitals were identified as high-cost hospitals, Medicare patients might face limited access to the specialized care these types of facilities offer.

Second, quality of care might be affected if the volume targets encourage medical staffs to skimp on care. Currently, hospitals and their staffs face mixed financial incentives. The prospective payment system (PPS) provides hospital administrators with financial incentives to limit the volume of inpatient care. To cite a common example, the introduction of PPS increased the likelihood that Medicare patients would complete their recovery in skilled nursing facilities rather than in the hospital (Kenney and Holahan 1991). Physicians, on the other hand, gain additional revenue from increased volume and longer stays. The tension between these two sets of incentives provides some check against either under- or over-use. The Administration's proposal would align the financial incentives of the hospital administration and hospital staff in favor of constraining the volume of care.

Administrative Cost and Complexity. The provision would increase the administrative complexity of the Medicare program. These burdens would fall largely on the Medicare carriers, though hospital medical executive committees and individual physicians would bear some as well.

Physicians would need to identify the hospital where care was delivered on any bills for inpatient services. Although Medicare has had a system of hospital identification numbers for years, it has never required physicians to report these numbers on Part B bills. In addition, hospital medical executive committees would need to appoint a fiduciary agent. They would also need to agree on rules for distributing returns of withheld funds or that the withheld funds be returned directly to the billing physicians.

Among the new administrative burdens for carriers would be the necessity to institute withholds for a different set of hospitals each year. This would require carriers to track payments and amounts withheld for each physician in each hospital, based on physicians'

reporting of the Medicare hospital identification number and site of service. These new data elements would clearly require audit and the associated adjudication of rejected claims. Carriers would then arrange for the return of withheld funds either to hospital fiduciary agents or directly to physicians.

Payment Formula. The formula for identifying and reimbursing high-cost medical staffs requires refinement along a number of significant dimensions. These are explained below, together with suggestions for potential changes and additional research.

First, the formula for identifying high-cost medical staffs excludes numerous legitimate determinants of service volume per hospital admission. At a minimum, the formula should contain all the factors in the PPS facility payment formula.[9] It is not plausible to hold the hospital harmless for some factor while simultaneously penalizing the hospital medical staff. Beyond the PPS payment formula, other potential determinants of inpatient service use might include emergency admission status (no time for preadmission testing), remote rural location (no alternative site of care), and hospital specialty status (triage of most severely ill patients). Thought might also be given to inclusion of care that is directly related to the admission but is delivered in the preadmission and postdischarge periods, as was done in the original research (Miller and Welch 1993).

Once the formula has been improved, it would be prudent to attempt to validate it through research. The approach would seem far less arbitrary if it were shown actually to identify problem hospitals. Measures of inappropriate care could be applied to high-cost medical staffs to confirm whether their high service use reflects demonstrable waste or inappropriateness. Variations in service use across categories of service could be examined to determine whether the high-cost designation is typically due to variation in certain DRGs or for certain provider specialties. The stability of the high-cost designation from one year to the next should also be directly demonstrated to guarantee that withholds are not the result of mere random variation in service use.

Second, the payment formula has a large "notch" in the imposition of the withhold. A single percentage point swing in volume per admission could place a hospital over the threshold and reduce physicians' current Medicare revenues by 15 percent. This magnifies the inevitable errors in claims processing and generates obvious (and potentially inequitable) differences across otherwise seemingly similar individuals. Such sensitive dependence on small utilization differences and the resulting large differences in current revenue between seemingly similar hospitals will surely place this policy under scrutiny.

Beyond the sharp payment notch that occurs when a hospital's volume crosses the threshold, however, the withhold is constant. This means that hospital staffs with very high volume of

[9] Relevant PPS payment factors include: outlier status of individual cases, hospital rural referral center and sole community provider status, differentials based on city size, and exemptions for certain classes of specialty providers such as psychiatric hospitals.

care have no incentive to modify their behavior. For example, a hospital staff with volume per admission that was twice the national average could either do nothing and lose 15 percent of its revenues, or bring its volume down to the threshold and lose 40 percent of its revenues.[10]

This suggests that a payment formula that changed more smoothly with hospital volume per admission might provide a better (but more complex) method of payment. The size of the withhold might vary by some fraction of the amount by which hospitals exceeded the threshold. This could avoid large payment disparities across similar staffs, and could maintain incentives for the highest-volume hospital staffs to reduce volume.

Third, the payment formula makes no allowance for regional variations in practice patterns. This provision has only two thresholds, one for urban hospitals and one for rural hospitals. There is not even an allowance for a smooth transition to allow for the gradual phasing out of existing variations in practice style.

From a practical standpoint, this lack of allowance for variations in practice patterns might result in dramatic local impacts on payment. This is difficult to assess without accurate simulation of the impact of the provision.[11] Some prior research, however, shows that average volume per admission was more than 20 percent above the national median in roughly one in five metropolitan statistical areas (Welch et al. 1993). In such localities, the majority of hospital services would be subject to the 15 percent withhold.

From a more theoretical standpoint, the elimination of some or even most of practice pattern variation may be desirable, but it is far from clear that the reimbursement system should ignore all variation. In particular, the total amount of hospital care consumed in any area depends on both the total number of admissions and on the services per admission. Areas with low hospital admission rates could use more services per admission without using a disproportionate share of inpatient services. Variation of that sort might make clinical sense if lower admission rates are the result of more stringent criteria for admission and hence a need for more services while in the hospital.

The large regional effects underscore a need for accurate simulations of alternative sets of standards. Performing an accurate hospital-by-hospital estimate of the effects of this provision on payments could be quite costly due to the enormous number of Part B data records involved. Nevertheless, the Congress needs to know the likely impact, particularly when entire MSAs appear to exceed the thresholds on average in the proposed provision. Large impacts suggest that local norms should be used, at least during a transition period. In addition, if the issue is regional equity in the total volume of hospital services per beneficiary, it is probably reasonable to hold hospitals to local norms that consider both volume of care per admission and the admission rate.

[10] The threshold of 120 percent of the median would be 60 percent of the hospital's current volume (1.2/2.0 = .60).

[11] Simulations have been performed by researchers at the Urban Institute, but HCFA has not yet released the results.

Alternate Approaches to Volume Control and Profiling

The high-cost medical staffs provision attempts to address two quite different problems: where to place the incentives for controlling volume, and where to institute profiling and examination of practice variations. Within this context, other approaches to volume control and profiling should be fully considered. The spectrum of options in these areas should be reviewed and carefully evaluated before adopting any one approach.

The Commission has previously considered ways to create incentives for smaller groups of physicians to control volume growth. It rejected the approach of allowing individual group practices to "carve out" their own separate volume standards. Instead, if incentives are to be offered to these kinds of groups, the avenue should be Medicare contracts with health maintenance organizations and not through a separate VPS (PPRC 1991). Second, the Commission recommended that HCFA be given specific authority to conduct a demonstration of a state VPS (PPRC 1993). The Commission reasoned that states often had the infrastructure, in the form of state medical societies and state chapters of specialty societies, to perform the types of peer-to-peer profiling and examination of practice patterns that would allow for the most rational reductions in the rate of volume growth.

As for profiling, any new initiatives should fit into the context of Medicare's significant ongoing efforts in this area. HCFA has a number of innovative profiling efforts under way. These are being carried out by the Health Standards and Quality Bureau (HSQB) and in its Bureau of Program Operations (BPO). The HSQB, for instance, is conducting a four-state pilot program on the management of heart attack, a single state study using medical chart abstracts to assess hospital medication errors, and a one-state profiling and intervention effort to examine the use of heart catheterization. The BPO, which formerly relied heavily on claim-by-claim prepayment screens for much of its utilization review, is now using more sophisticated and flexible approaches. Currently, the BPO is working with all carriers to compare local area utilization rates with national norms, and establishes the framework under which carriers create and distribute educational materials for physicians whose practices deviate from local norms.

One particular advantage of the high-cost medical staffs provision would be a greater involvement of physicians in the profiling process. But the hospital medical staff may not be the best vehicle to accomplish this. Specialty societies or other independent organizations might have the advantage of peer-to-peer interactions, while fitting more readily into HCFA's ongoing profiling efforts. Thought should be given to funding more cooperative demonstrations with these types of physician organizations before redirecting HCFA's profiling effort to thousands of hospital medical staffs.

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CHAPTER 22

BONUS PAYMENTS IN HEALTH PROFESSIONAL SHORTAGE AREAS

Since 1989, Medicare has furnished bonus payments to physicians providing care in certain underserved areas. Currently, physicians receive an additional 10 percent payment from Medicare for the services they deliver in urban and rural Health Professional Shortage Areas (HPSAs).

The Commission first recommended such bonuses in 1987 to support access to care for underserved Medicare beneficiaries. Since then, it has monitored the implementation and impact of this policy. Because of improved claims reporting, the Commission is now able to measure some aspects of how the bonus payments have affected physicians and beneficiaries and to consider the merits of proposed modifications to this policy. Among the important issues explored are whether physicians' participation in the HPSA program corresponds with the program's intent, and the extent to which the bonus payments appropriately target underserved Medicare beneficiaries and their needs.

RECOMMENDATIONS

Medicare bonus payments should continue to apply to all physicians' services in urban and rural Health Professional Shortage Areas at the current level of 10 percent.

In addition, two previous recommendations are reaffirmed:

- **In areas in which Health Professional Shortage Area status is withdrawn because of an increase in physician supply, Medicare should continue to provide bonus payments for an additional three years.**

- **Nonmetropolitan counties whose poverty rate exceeds 25 percent should automatically qualify for Medicare bonus payments, regardless of their Health Professional Shortage Area status. Because of the difficulty of clearly defining the geographic boundaries of inner city areas, the feasibility of broadening eligibility in urban areas should be explored.**

The Commission also reiterates its recommendation to extend bonus payments to nonphysician practitioners in HPSAs as another step to improve access (see Chapter 14).

This chapter first describes the purpose of the bonus payment program and then evaluates whether intermediate program goals that can be measured at this time are being achieved. This evaluation includes analyses of the kinds of physicians who receive bonus payments, which services they are providing, and the beneficiaries who are obtaining these services. Finally, the issues raised by the analyses are discussed. In particular, proposed efforts to target primary care are considered within the context of facilitating overall access to care for underserved beneficiaries.

PURPOSES OF MEDICARE BONUS PAYMENTS

The bonus payments distributed through Medicare to physicians practicing in underserved areas are one part of a comprehensive approach to address the complex social, economic, and professional factors that obstruct access to health care. An insufficient number of health professionals in many of the nation's rural and inner-city areas is an important contributor to inadequate access. By giving physicians a financial incentive to practice in underserved areas, bonus payments are one means of achieving the long-term goals of improving physician supply—and thus access to care—for Medicare beneficiaries who live in these areas.

Background

The Commission has long been interested in the use of physician payment policies to improve access to medical care for underserved populations. Despite Medicare coverage, some beneficiary groups continue to face major barriers to access. As a part of the larger process of advancing the goals of Medicare payment reform, the Commission in 1987 recommended using a bonus payment to supplement Medicare's physician payment and to complement ongoing federal policies to increase access to health care services in underserved areas (PPRC 1987). It concluded that in certain areas where payments were historically low, additional financial incentives would be necessary to ensure adequate access. Correspondingly, the Congress instituted a 5 percent bonus payment, which began in 1989, for all Medicare physicians' services delivered in rural HPSAs having the most severe physician shortages.[1] In 1991, the bonus was increased to 10 percent and extended to services delivered in all urban as well as rural HPSAs.

The HPSA classification provides a mechanism to identify the areas with access problems stemming from physician shortages. It was originally used to place physicians serving in the National Health Service Corps. The Public Health Service administers and annually updates the lists of urban and rural geographic areas, population groups, or medical facilities with shortages of primary care physicians, dentists, or mental health professionals. For the purposes of the Medicare bonus payment program, only geographic areas with shortages of

[1] HPSAs are categorized into four groups depending on the severity of their physician shortage.

primary care physicians, defined as those in general or family practice, general internal medicine, pediatrics, and obstetrics and gynecology, are so designated. As of December 31, 1992, there were 1,838 such areas, with a total population of more than 33 million people (HRSA 1992).

Three criteria are used to define the HPSAs. First, the geographic area must be rational for the delivery of health services. The area may be an entire county, a portion of a county, an area made up of more than one county, or an established neighborhood or community within a metropolitan area. Second, a specified population-to-primary care physician ratio must be exceeded. Specifically, the area must have either a population-to-primary care physician ratio of at least 3,500:1, or a population-to-primary care physician ratio of less than 3,500:1 but more than 3,000:1. In the latter case, the area must also have unusually high needs for primary care services or insufficient capacity of existing primary care providers.[2] Third, resources in contiguous areas must be shown to be overutilized, excessively distant, or inaccessible (HCFA 1980).

Long-Term Program Goals

The bonus payments potentially can improve access to health care either by attracting physicians to underserved areas, or by encouraging those already practicing in HPSAs to stay, so that they can more readily serve the Medicare beneficiaries living there. Increased payment could also improve physicians' preferences to serve patients with Medicare as opposed to those with other means of payment. Previous review of relevant literature has indicated that physician location and retention decisions are somewhat influenced by financial factors (Bogen et al. 1989). The bonus payments were therefore implemented with the understanding that although financial consideration is only one factor affecting physician location, payment policies and incentives could affect these decisions. The Commission, in its *Annual Report to Congress 1992*, gave this issue particular consideration, concluding that payment incentives appear to have greater potential for retaining physicians currently located in underserved areas than for attracting new physicians (PPRC 1992a).

Owing to the gradual and relatively recent introduction of the bonus payments, the program's effects on physician supply and beneficiary access to care cannot be accurately assessed at this time. A comparison of physician supply or beneficiary access to care in urban and rural HPSAs before and after implementation of the bonus payment program would be complicated by several factors. First, the five years of experience with the bonus payments in rural areas and three years in urban ones is not necessarily sufficient to achieve observable

[2] Unusually high needs for primary care services are defined as more than 100 births annually per 1,000 women 15 to 44 years old, more than 20 infant deaths per 1,000 live births, or more than 20 percent of the population with incomes below the poverty line. Insufficient capacity of an area's existing primary care providers is determined based on the number of office outpatient visits per year per primary care physician, the amount of time patients must wait for appointments with primary care physicians, the utilization rate of emergency room facilities for routine care, the proportion of physicians accepting new patients, and the utilization rate of health services.

results. It took some time, for instance, for physicians who qualified for bonus payments to learn they were eligible. Second, because the bonus payments were implemented as the Medicare Fee Schedule was phased in, their effects cannot be easily distinguished from those of other aspects of physician payment reform. Additionally, factors other than Medicare payment influence physician supply and beneficiary access in these areas.

A report to be released from the Health and Human Services' Office of the Inspector General provides some insight into physicians' perspectives on Medicare's incentive payments (OIG 1993). Based largely on a survey of physicians who have participated in the HPSA program, this report focuses on the impact of the bonus payments on location decisions, emphasizing the extent to which the program improves access to primary care in underserved areas. Of particular interest are survey results that describe the perceived importance of these payments. Of 497 physicians surveyed, 26 percent describe the bonus payments as extremely or very important in their decisions about where to practice. Another 40 percent considered the payments moderately or slightly important, while 34 percent said that they are not important. Interpretation of these results should take into consideration the modest size of the bonus payments.

BONUS PAYMENT DISTRIBUTION

Although it is too early to evaluate the success of the bonus payment program in achieving long-term goals, currently available claims and other data permit an assessment of progress toward intermediate goals. These include making physicians aware of their eligibility for the bonus payments, facilitating access to primary care services, targeting underserved beneficiaries, and ensuring that the program is efficiently administered by Medicare carriers. Beginning in 1991, the Medicare carriers, under the Health Care Financing Administration's (HCFA) direction, began including a modifier on claims data to distinguish services for which a bonus payment was claimed. Data from the first six months of 1992 are the first complete set of claims to include this HPSA modifier and provide the basis for much of the following analysis.[3]

The preliminary findings are generally encouraging. The fact that an increasing number of physicians are claiming the bonus payments is one optimistic sign. In both urban and rural areas, a significant share of the bonus payments supports services for vulnerable populations, particularly poor Medicare beneficiaries. Analyses have also demonstrated significant targeting of primary care physicians and services by the bonus payments. The primary care orientation, however, is stronger in rural than in urban HPSAs. In addition, in urban areas, bonuses are more often being paid to physicians serving beneficiaries who do not actually

[3] Because of the retrospective nature of the review process, data on HPSA payments include some services that may not have technically qualified for a bonus payment. It is assumed that similarly, a portion of services actually performed in HPSAs are not so indicated and reimbursed.

live in HPSAs. While this finding reflects the differences in resources and patterns of care between rural and urban areas, it is partly because of the difficulty in differentiating urban HPSAs with available data analysis techniques.

Aggregate Data on Bonus Payments

Since 1989, both the number of physicians claiming HPSA bonus payments and the total incentive payments distributed have rapidly increased (Table 22-1). This was especially true in 1991, when the program was expanded to include urban HPSAs and the bonus was increased to 10 percent. That year, payments rose more than sevenfold, and the number of physicians benefiting from the bonus payments nearly quadrupled. As physicians become more familiar with the program, this trend is continuing. Between 1991 and 1992, the total amount of payments disbursed by the bonus program doubled, particularly increasing in urban areas, while the number of physicians receiving bonus payments rose by one-third.

Table 22-1. Distribution of Health Professional Shortage Area Bonus Payments

Year	Bonus Payments (Dollars)			Number of Physicians[a]			Mean Payment per Physician (Dollars)	
	Total	Urban	Rural	Total	Urban	Rural	Urban	Rural
1989	1,950,000	[b]	1,950,000	4,290	[b]	4,290	[b]	454
1990	4,060,000	[b]	4,060,000	5,520	[b]	5,520	[b]	735
1991	31,600,000	13,200,000	18,400,000	21,600	7,170	14,400	1,840	1,280
1992	63,200,000	33,500,000	29,700,000	28,500	11,100	17,400	3,020	1,710

SOURCE: HCFA, unpublished quarterly report, 1993.

[a] Based on information for the fourth quarter.

[b] Payments to physicians in urban Health Professional Shortage Areas began in January 1991.

Using data from 1992, claims for which a HPSA bonus was paid (referred to here as HPSA services) were examined.[4] That year, about 2 percent of Medicare physician payments were for HPSA services, split relatively evenly between payments to physicians in urban and rural areas. This amounts to approximately $63 million disbursed in bonus payments for

[4] Allowed charges for HPSA claims do not include the 10 percent bonus payment.

the full 1992 calendar year. Rural HPSA services made up 7 percent of all physician payments in rural areas, and 1 percent of urban payments were claimed as provided in an urban HPSA. Average annual bonus payments tend to be significantly higher for physicians in urban HPSAs than for those in rural HPSAs. More than half the physicians receiving bonus payments practice in rural HPSAs, but more than half the bonus payments disbursed are for services provided in urban HPSAs. The mean annual bonus payment per physician who billed for HPSA services in 1992 was approximately $3,000 in urban HPSAs and $1,700 in rural HPSAs.[5] This may reflect both higher fee levels and higher volume of services in urban areas in general, as well as the fact that there are more specialists in urban areas.

Analyses of Bonus Payment Distribution

Claims data can be used to characterize the specialties and service mix of the physicians who receive bonus payments, as well as the sociodemographic characteristics of beneficiaries they serve. Because access to primary care is a fundamental concern in underserved areas, the following analyses focus on the extent to which the bonus payments support primary care physicians and services in the urban and rural HPSAs. Although the primary care physician-to-population ratio is a criterion used to designate which areas receive the Medicare bonus payments, the program requires only that a service be performed in a HPSA to qualify for a bonus payment. This allows the bonus to be distributed to physicians in all specialties, when providing nonprimary care services as well as primary care services.

For these analyses, primary care physicians are defined as those who identify their practice specialty as internal medicine, family practice, or general practice. The Omnibus Budget Reconciliation Act of 1987 (OBRA87) defines primary care services as "physicians' services which constitute office medical services, emergency department services, home medical services, skilled nursing, intermediate care, and long-term care medical services, or nursing home, boarding home, domiciliary, or custodial care medical services."

Physician Specialty and Type of Service. Analysis of claims data shows that the bonus payments support a significant share of primary care physicians and services. In 1992, primary care physicians collected about half the payments in urban and rural HPSAs, compared to one-quarter of the payments in other areas (Table 22-2). A similar relationship was seen with payments for primary care services, which accounted for one-third of the total payments disbursed in HPSAs, and one-fifth of payments made in other areas (Table 22-3).

[5] The median payments in these areas may be somewhat lower.

Table 22-2. Payments for Health Professional Shortage Areas and Other Areas, by Specialty, 1992 (percentage)

Specialty	Total Non-HPSA	HPSAs Total	HPSAs Urban	HPSAs Rural
Primary Care Specialties	25.0	49.0	33.9	63.6
Internal medicine	16.7	20.1	21.7	18.6
Family practice	5.4	19.7	7.7	31.2
General practice	3.0	9.2	4.5	13.7
Other Specialties	75.0	51.0	66.1	36.4
General surgery	6.0	9.4	8.2	10.5
Ophthalmology	10.4	7.1	7.9	6.4
Cardiovascular disease	8.0	4.1	6.9	1.4
All other	50.6	30.4	43.1	18.1

SOURCE: Physician Payment Review Commission analysis of first six months of 1992 Medicare claims, 5 percent beneficiary file.

Differences between the program experiences in urban and rural areas indicate that the bonus payments are more sharply targeted toward primary care physicians and services in rural than in urban HPSAs. Nearly two-thirds of payments in rural HPSAs were made to primary care physicians, compared with about one-third of payments in urban HPSAs (Table 22-2). Similarly, primary care services accounted for 41 percent of payments in rural HPSAs, but only 26 percent of payments in urban HPSAs (Table 22-3). This reflects in part the greater orientation toward specialized services seen in urban as opposed to rural practices. When compared with non-HPSAs, the bonus payments in urban HPSAs nonetheless support larger shares of primary care physicians and services.

Table 22-3. Payments for Health Professional Shortage Areas and Other Areas, by Service, 1992 (percentage)

	Total Non-HPSA	HPSAs Total	HPSAs Urban	HPSAs Rural
Primary care services	20	34	26	41
Other services	80	66	74	59

SOURCE: Physician Payment Review Commission analysis of first six months of 1992 Medicare claims, 5 percent beneficiary file.

NOTE: Primary care services defined according to OBRA87.

Specialists are performing larger proportions of primary care services in both urban and rural HPSAs than elsewhere. This finding may reflect the inadequacy of the legislative definition of primary care, as well as differences in the nature of practice in HPSAs because of the general undersupply of physicians in the rural areas and shortage of primary care physicians in urban areas. A significant portion (about 44 percent) of the primary care services in urban HPSAs are delivered by specialists, particularly those in general surgery and cardiovascular disease, who are not generally regarded as primary care physicians (Table 22-4). In rural HPSAs, primary care physicians provide nearly 79 percent of primary care services. Nonetheless, specialists in these areas also furnish larger proportions of primary care services than is typical of their counterparts in other areas (Table 22-5). In rural HPSAs, 23.9 percent of specialists' payments are for primary care services, nearly twice the percentage paid in non-HPSAs (12.7 percent).

Table 22-4. Payments for Primary Care Services in Health Professional Shortage Areas and Other Areas, by Specialty, 1992 (percentage)

	Total Non-HPSA	HPSAs		
		Total	Urban	Rural
Primary Care Specialties	52.3	69.9	55.7	78.7
Family practice	13.4	30.2	15.6	39.2
Internal medicine	30.9	23.8	29.9	20.1
General practice	8.0	15.9	10.2	19.4
Other Specialties	47.7	30.1	44.3	21.4
General surgery	4.0	5.6	4.7	6.2
Cardiovascular disease	6.6	3.4	6.7	1.5
All other	37.1	21.1	32.9	13.7

SOURCE: Physician Payment Review Commission analysis of first six months of 1992 Medicare claims, 5 percent beneficiary file.

NOTE: Primary care services defined according to OBRA87.

Beneficiary Utilization. Another aspect of the bonus payment program evaluation involves the extent to which the program benefits the underserved. Analyses of claims data help describe the people who are obtaining treatment in the shortage areas, to identify how well the program is targeting its intended population. This section profiles beneficiaries (referred to as HPSA users) who have received any service for which a HPSA bonus was paid during the first six months of 1992. A key issue, particularly in urban HPSAs, is the amount of the bonus payments that supports care of the poor.

The different characteristics of urban and rural HPSAs make it important to examine them separately to understand whether the bonus payment program effectively targets the

Table 22-5. Payments for Primary Care Services as a Share of Total Payments in Health Professional Shortage Areas and Other Areas, by Specialty, 1992 (percentage)

	Total Non-HPSA	HPSAs		
		Total	Urban	Rural
Primary Care Specialties	41.7	48.0	43.3	50.5
General practice	54.3	58.2	59.1	57.9
Family practice	49.8	51.6	53.4	51.2
Internal medicine	36.9	39.9	36.3	43.9
Other Specialties	12.7	19.9	17.6	23.9

SOURCE: Physician Payment Review Commission analysis of first six months of 1992 Medicare claims, 5 percent beneficiary file.

NOTES: Primary care services defined according to OBRA87. Services measured as allowed charges.

underserved. For this analysis, urban and rural categories are those within metropolitan statistical areas and those that fall outside of these, respectively. Of those beneficiaries receiving HPSA services, 63 percent live in rural areas (Table 22-6). While 73 percent of the rural HPSA users actually live in a HPSA, only 36 percent of urban HPSA users live in a HPSA. This difference may in part reflect the difficulty in determining for analytic purposes which urban areas qualify as HPSAs because of their size and irregular boundaries.[6]

Physicians receiving the bonus payments for services delivered in both rural and urban HPSAs tend to treat more vulnerable beneficiaries, especially those who live in impoverished areas, compared with physicians in other rural and urban areas (Table 22-6). Specifically, 17 percent of the HPSA users live in ZIP codes classified as high-poverty areas. This is significantly greater than the proportion of the total Medicare population living in poverty areas (5 percent), and appears to hold true across both urban and rural areas. The proportion of beneficiaries who are eligible for both Medicaid and Medicare—another measure of low income—is also much greater for HPSA users in both urban (22 percent) and rural (23 percent) areas than is the case for the total population of dual eligibles (13 percent).

[6] A crosswalk from census tract to ZIP code was used to determine whether or not a person lives in a HPSA. Inaccuracies occur because in some cases either a census tract can fall in more than one ZIP code, resulting in persons who actually live in a HPSA not being identified, or in only a portion of a ZIP code, causing persons who do not live in a HPSA to be classified as such.

Table 22-6. Characteristics of Health Professional Shortage Area Users Compared with Total Medicare Beneficiary Population (percentage)

Beneficiary Characteristic	Total		Urban		Rural	
	Medicare Population	HPSA Users	Medicare Population	HPSA Users	Medicare Population	HPSA Users
Live in poverty area (more than 30% of population)	5	17	4	12	8	20
Dually eligible Medicaid/ Medicare	13	23	13	22	15	23
African American	8	14	8	18	6	11
Disabled	14	18	14	19	16	17
Old old (over age 85)	11	12	11	11	10	12
Live in HPSA*	10	59	5	36	22	73
Live in rural area	28	63	n/a	n/a	n/a	n/a

SOURCE: Physician Payment Review Commission analysis of first six months of 1992 Medicare claims, 5 percent beneficiary file.

* Estimated based on a crosswalk from census tract to ZIP code of beneficiary.

NOTES: A Health Professional Shortage Area (HPSA) user is a Medicare beneficiary who received at least one service in a HPSA for which the physician claimed a bonus payment. Urban and rural categories are those within metropolitan statistical areas and those that fall outside of these, respectively.

Along with poor beneficiaries, other vulnerable population groups are being served by the bonus payment program in both urban and rural HPSAs. African American beneficiaries in urban HPSAs are illustrative. Whereas 8 percent of all Medicare beneficiaries living in urban areas are African American, 18 percent of urban HPSA users are African American. They also represent a higher percentage of rural HPSA users than is found among the total Medicare population. A higher proportion of HPSA users is disabled (18 percent), particularly among urban HPSA users, than the proportion of disabled beneficiaries found within the general Medicare population (14 percent).

By bolstering physician supply in underserved areas, the bonus payment program is intended to enable beneficiaries to obtain health care treatment without having to travel great distances. That nearly 45 percent of HPSA users received more than half their services from a physician practicing in a HPSA appears consistent with this objective (Table 22-7). Moreover, of the HPSA users who received at least one primary care service in a HPSA, 65 percent received more than half their primary care services from a physician receiving a

Table 22-7. Beneficiaries Who Received More Than Half of Their Services in a Health Professional Shortage Area, 1992 (percentage)

	Total	Urban	Rural
All services	43	37	46
Primary care services	65	58	68

SOURCE: Physician Payment Review Commission analysis first six months of 1992 Medicare claims, 5 percent beneficiary file.

NOTE: Includes only beneficiaries who received at least one service in a Health Professional Shortage Area for which the physician claimed a bonus payment.

bonus payment. Not surprisingly, beneficiaries in rural HPSAs were more likely than those in urban HPSAs to receive a majority of their services in the HPSA.

Targeting Areas of Physician Shortage

One factor influencing the effectiveness of the bonus payment program is the ability of the HPSA designation to target underserved Medicare populations accurately. Because shortage areas are not designated specifically for this purpose, the Commission has been concerned with weaknesses in using HPSAs for distributing the bonuses. For example, since the HPSA designation is largely determined by the physician-to-population ratio, the addition of a primary care physician who was attracted by the bonuses could possibly forfeit the opportunity to qualify for Medicare bonus payments. Additionally, HPSA designation evaluates current physician availability only, rather than inherent characteristics that may deter providers from practicing in particular areas.

In its 1992 annual report, the Commission proposed two refinements to enhance the definitions of the vulnerable areas to better meet needs of underserved populations (PPRC 1992a). To prevent erratic payment changes, it recommended that the bonus be continued for an additional three years in areas that lose their HPSA designations because of an increase in the physician-to-population ratio. Although several pending bills have incorporated this recommendation, the Congress has not adopted any further changes in the bonus payment policy.

Additionally, the Commission recommended a strategy to include rural areas prone to physician shortages that the HPSA criteria may fail to identify. The bonus payments should be provided in all nonmetropolitan counties where the poverty rate exceeds 25 percent, in addition to currently designated shortage areas. After analyzing the relationship between poverty and population density and physician supply in rural counties, the Commission

determined that poverty is a suitable indicator of physician shortages. Similar analyses of urban ZIP codes produced less conclusive results. The more irregular geographic boundaries of inner cities make it harder to identify urban areas that are susceptible to provider shortages, yet may not qualify as HPSAs. It is also more difficult to administer and monitor bonus payments within small urban regions as has been evidenced by urban HPSAs. The Commission plans to continue exploring alternative methods to broaden eligibility for bonus payments in urban areas.

Distributing the Bonus Payments

The Commission has also monitored the process used to administer bonus payment claims. Medicare carriers provide general program information (e.g., bulletins containing updated listings and, sometimes, area maps) to notify physicians about HPSA designations and status. Physicians must then indicate when filing a claim that the procedure was performed in a HPSA in order to obtain the relevant bonus payment. Bonus payments to physicians are disbursed quarterly by the Medicare carriers. The quarterly totals from the carriers provide information on the size of the HPSA program and the number of physicians collecting the bonus.

Carriers audit the claims for HPSA bonus payments each quarter. After the payments are distributed, the carriers select a 25 percent sample of the claims to review eligibility. During the first three quarters of 1993, 12 percent of reviewed claims were found to be paid incorrectly (HCFA 1993). More detailed review has revealed that problems are attributable primarily to physicians misunderstanding the requirement that the specific service must be delivered in a HPSA in order to qualify for the bonus, regardless of the physician's usual practice site. Other problems arise because of carrier misinformation regarding the HPSA designation, and from physicians claiming bonuses for services delivered in areas that no longer qualify as HPSAs. HCFA has been making strides in working with the carriers to improve the administration and monitoring of the program. As physicians have become better acquainted with the program specifics, instances of misclassification have decreased.

Although the current claims process may seem excessively complex, automating the bonus payment process appears infeasible at this time because of two administrative complications. The first problem involves the multiplicity of physician locations. Physicians may have more than one office and provide services in several locations, not all of which may be in a HPSA. Since the bonus payment qualification is based on the location of service delivery, the provider ZIP code indicated in the claims information cannot alone determine bonus payment eligibility. This difficulty is compounded by the irregular geographic patterns of the HPSA boundaries, particularly in urban areas where one side of the street may be designated a HPSA, while the other side is not. A five-digit ZIP code is not sufficiently accurate to identify HPSAs.

The Commission plans to investigate ways to improve administration of bonus payments and facilitate access monitoring. One area of particular interest is the feasibility of using a nine-digit ZIP code to identify providers' office locations. This may pinpoint the boundaries of the shortage areas more accurately, thereby facilitating payment and monitoring as well as future research.

CONSIDERATION OF PROPOSED MODIFICATIONS

Several options have been proposed to modify the administration of Medicare bonus payments, yet none of them is compelling enough to offer a clear improvement over the current policy. Among proposed changes are using beneficiary residence as a criterion for distributing the bonus payments, redirecting the payments according to type of service or physician specialty, and raising the rate of payment to as high as 20 percent. Inasmuch as the 10 percent bonus payments show promise in supporting the delivery of services to underserved populations, they should continue to apply to all physicians' services in urban and rural HPSAs.

A number of considerations led to this conclusion. First, the early stage of the program and the inherent difficulty in assessing the accomplishment of its long-term goals preclude an evaluation of the impact that changes could have on physician supply and beneficiary access to care. Second, the degree of achievement of the intermediate goals is generally encouraging. The bonus payments are substantially targeting both primary care delivery and vulnerable beneficiary populations. The evidence of specialist involvement in the urban HPSAs does not indicate a problem with the current distribution of the bonus payments, as beneficiaries in underserved areas lack access to specialty as well as primary care.

Urban Areas

Given the unique circumstances of urban underserved areas where a severe lack of local primary care physicians may be juxtaposed by a high concentration of specialists in nearby hospitals, several changes have been proposed to potentially increase the primary care focus of the bonus payments, or better target the payments to benefit underserved beneficiaries. These respond to the concern that the degree of specialty care that the bonuses support in the urban HPSAs could reflect payments to physicians in urban hospitals for treating beneficiaries from outside areas. In attempting to ameliorate a negative aspect of the program, however, care must be taken not to jeopardize its positive effects.

Targeting Underserved Beneficiaries. One option to target the bonus payments to benefit vulnerable beneficiaries who actually live in the underserved areas is redefining qualifications for the bonus payments using beneficiary residence as a criterion. A combination of policy and administrative complications, however, appears to make this option infeasible.

Contractors who are responsible for designing and implementing the carrier claims systems indicate that the technical complications associated with implementing such a strategy are formidable. Since the provider could not be expected to know whether beneficiaries live in underserved areas, this information would need to be extracted from either the beneficiary address the physician gives on the claims form or the address associated with the beneficiary through the identification code. Both of these options are unreliable, however, since the address given is often incorrect, illegible, or outdated because of seasonal residence changes and the general mobility of beneficiaries. If residence within a HPSA were used as the identifier, these difficulties would be compounded by the administrative obstacles in identifying the addresses situated in HPSAs. Additionally, HPSAs are designated to determine physician shortage areas, not necessarily areas containing the most acutely underserved beneficiaries.

Using beneficiary residence as a criterion for distributing the bonus payments also has complications from a policy perspective. It may not seem appropriate to distribute bonus payments to physicians for providing hospital inpatient specialty care to beneficiaries from outside the underserved areas. Since the extent of this situation is not clear, however, care must be taken not to hinder access to necessary care in the process of avoiding such undesirable use of the program. From the standpoint of improving beneficiary access to care in urban underserved areas, physicians who choose to locate in HPSAs perhaps should be rewarded for practicing and therefore becoming an available resource in HPSAs regardless of whom they serve. Additionally, since physicians may not know whether or not the beneficiaries live in underserved areas, this policy may not serve to influence behavior in any constructive manner.

Targeting Primary Care. Focusing on the delivery of primary care is a method that has been proposed to refine the targeting of the bonus payments in urban HPSAs. Primary medical care is emphasized as a key element in reshaping the health care system to ensure access and appropriate use of services, particularly in underserved areas where early treatment may be neglected. Yet the degree to which the bonus payments should focus specifically on primary care delivery rather than all elements of medical practice in underserved areas is unclear. Limiting the bonus payments to primary care services or primary care physicians does not clearly improve the targeting of the bonus payments.

Limit to Primary Care Physicians. Limiting the bonus payments in urban HPSAs to primary care physicians is one approach considered to target primary care. By providing underserved beneficiaries with an entry point into the health care system, primary care physicians could direct patients to specialists when necessary. It may not be safe to assume that focusing on primary care physicians alone, however, would lead to access to specialists' care. It is possible that hospitals in some urban underserved areas could attract an adequate supply of specialists while primary care physicians remain scarce. If the specialists are already in the area, maintaining a poverty area practice, it may be wise to fully utilize and reward their efforts.

A major complication associated with implementing such a policy involves the difficulty in accurately identifying true primary care providers. Many physicians who might typically be considered specialists seem to be providing primary care, particularly when confronted with the severe lack of primary care physicians found in many urban HPSAs. A policy to limit bonus payments to primary care physicians would exclude such providers. Furthermore, the availability of specialists in underserved areas may make these areas more attractive for other physicians. Since both urban areas and specialists receive reductions under implementation of the Medicare Fee Schedule, a bonus payment may be an important tool to ensure the retention of these physicians.

Identifying primary care physicians is further complicated by administrative issues. Since Medicare information on physician specialty is self-reported, the definition may vary among physicians and carriers. Currently, these specialty codes are used only for medical review purposes, because Medicare payment is implemented with no specialty differentiation. This may be particularly problematic for the field of internal medicine, which encompasses many subspecialties. By distinguishing the types of procedures performed by the various specialties of physicians, many procedure-oriented practices can be identified within this internal medicine category (see Chapter 19).

Limit to Primary Care Services. Limiting the bonus payments to primary care services in urban HPSAs was considered as an alternative method of targeting primary care. Both the Administration's health reform proposal and a bill introduced by Senator Baucus (S. 1473) propose limiting urban bonus payments to primary care services, while raising the bonus to 20 percent of the Medicare payment.

This policy may go beyond targeting bonus payments, however, to exclude services necessary for improving access in underserved areas. The legislative definition of primary care services falls short of including all of the true primary care provided by physicians. For example, routine services that are a part of provision of primary care may not be identified as primary care services. Additionally, services defined as primary care may encompass specialized care. This is particularly true in the case of office visits. By limiting bonus payments to primary care services only, physicians would not receive the bonus for many of the necessary services they provide to beneficiaries in HPSAs. This may be particularly troublesome since beneficiaries in urban HPSAs and other impoverished areas tend to have below-average use of many surgical and other specialty services as well as primary care visits (PPRC 1992b).

Analysis of the payments distributed in 1992 indicates that nearly three-fourths of bonus payments in urban HPSAs would be eliminated by limiting the bonus to primary care services (Table 22-8). Yet even if this provision were implemented in conjunction with an increase in the payment rate to 20 percent as has been proposed, primary care physicians, whose practice in urban HPSAs consists of about 43 percent primary care services, would be expected to receive slightly less in bonus payments than they do now.

Combination of Primary Care Physicians and Services. An alternative policy the Commission considered is to provide bonus payments to primary care physicians for all Medicare services, and to other physicians only for primary care services. In other words, nonprimary care physicians would receive no bonus for nonprimary care services. Two variants of this approach were considered: maintaining the 10 percent bonus rate for all HPSA services, and raising the bonus for primary care services to 20 percent (Table 22-8). Singling out primary care physicians would assure them of receiving the full extent of the bonus, regardless of the proportion of office visits they perform. The complications involved in defining primary care physicians and primary care services, however, remain, making this change inadvisable.

Rural Areas

Increasing the value of bonus payments in rural HPSAs has been proposed to further encourage physicians to practice in these underserved areas, thereby facilitating beneficiary access to primary care. Yet there is insufficient evidence at this time to indicate that raising the bonus payment level would make the HPSA program more effective. Further, because there is no clear indication that the incentive payments are more successful in addressing barriers to access in rural than in urban HPSAs, creating a differential would be premature.

Two methods have been proposed to increase the bonus payments in the rural HPSAs. Since analyses show that these payments target primary care delivery fairly well in rural HPSAs, raising the bonus to 20 percent for all services (as provided in S. 1473) or only for primary care services (as proposed by the Administration) would produce similar results (Table 22-8). With the Administration's proposal, however, the difficulties due to the legislative definition of primary care persist.

It is not yet possible to determine the magnitude of the incentive necessary to influence location decisions. The bonus rate in rural HPSAs was increased to 10 percent from 5 percent in 1991. For family practitioners, a payment of this magnitude increases net income by more than 5 percent (PPRC 1992a). This may not appear to be a profound incentive for providers to locate and practice in these areas. Nonetheless, preliminary survey and anecdotal evidence indicate that, although the bonus payments are relatively modest, physicians do consider them when choosing where to practice. In fact, the payments may help persuade some to stay. At this point, there is no indication that raising the bonus payments will make the HPSA program more effective.

Since there is no evidence to indicate that access to care is significantly poorer for Medicare beneficiaries in rural HPSAs than for all beneficiaries living in rural areas, making more areas eligible for the HPSA program—rather than raising the bonus—may be more important at this time (PPRC 1993). The rate at which beneficiaries in rural HPSAs receive at least one primary care service or other service is very similar to that found in all rural areas. Therefore, improvements to the criteria for designating the rural underserved areas should be

Table 22-8. Estimated Distribution of Bonus Payments for Primary and Nonprimary Care Services under Various Options (percentage)

Option	Primary Care Physicians		Specialists		Overall Change
	Primary Care Services	Nonprimary Care Services	Primary Care Services	Nonprimary Care Services	
Urban HPSAs					
Current 10% bonus	15	19	11	55	*
Limit to primary care services, increase to 20%	56	*	44	*	Eliminates 48% of urban bonus payments
Apply to primary care physicians and primary care services, 10% bonus	33	42	24	*	Eliminates 55% of urban bonus payments
Apply to primary care physicians and primary care services, increase to 20% for primary care services	42	27	31	*	Eliminates 29% of urban bonus payments
Rural HPSAs					
Current 10% bonus	32	32	9	27	*
Increase to 20% for primary care services	45	23	13	19	Increase rural bonus payments by 41%

SOURCE: Physician Payment Review Commission analysis of first six months of 1992 Medicare claims 5 percent beneficiary file.

* Not applicable.

NOTE: Primary care physicians defined as internal medicine, family practice or general practice. Primary care services defined according to OBRA87.

implemented before a further increase in payment is considered. Including all rural counties with high poverty rates along with HPSAs in the bonus payment program, and also continuing the bonus for three years after an area loses its designation, would be appropriate steps toward targeting relevant physicians and beneficiaries.

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APPENDIX A

USE OF MEDICARE FEE SCHEDULE POLICIES BY OTHER PAYERS: AN UPDATE

The Omnibus Budget Reconciliation Act of 1989 (OBRA89) directed the Medicare program to pay for physicians' services using a resource-based fee schedule. Although this provision applies only to Medicare, its applicability to other payers is of interest to many. Other payers can use aspects of the Medicare Fee Schedule, such as the relative value scale (RVS), to modify their payment structures.

Over the last three years the Commission has followed the initiatives by private payers and state Medicaid programs to revise their payment methods in line with the Medicare payment reform. In its *Annual Report to Congress 1993*, the Commission reported that many Blue Cross Blue Shield (BCBS) plans and managed-care products sponsored by commercial insurers had incorporated Medicare's RVS into their fee schedules, while a few commercial indemnity insurers that paid according to customary, prevailing, and reasonable (CPR) charge systems had taken steps to integrate the RVS into their payment methodologies. In addition, nine Medicaid programs had or soon would adopt Medicare's RVS as the basis for their fee schedules, and eight others were actively exploring its applicability (PPRC 1993).

An April 1993 survey performed by Deloitte & Touche for Health Economics Research (HER) confirmed these trends. One-third of the 333 payers that responded indicated that they were using Medicare's RVS in some manner, such as to replace an existing payment system with one based on the RVS or simply as a tool to identify overvalued codes. Another 40 percent were considering using it. The HER report also indicates that other types of payers not included in the Commission's 1992 survey, such as state workers' compensation programs and the Civilian Health and Medical Program of the Uniformed Services program, were also using Medicare's RVS (McCormack 1993).

Over the past year, the Commission has continued to follow the initiatives by private payers and state Medicaid programs, through informal contact with private payers and repeating its survey of Medicaid programs. This appendix provides an update on how they are currently using Medicare's RVS.

The number of private insurers and Medicaid programs adopting Medicare's RVS is growing. Among private insurers, BCBS plans and preferred provider organizations (PPOs) sponsored by commercial insurers are still the primary users. As of February 1994, 12 Medicaid programs had adopted the RVS, and eight other programs had decided to adopt it in the near future.

In some market areas, a large number of insurers are basing payments for physicians' services on the RVS. In the case of Oregon, for example, Medicaid, the BCBS plan, and several PPOs and individual practice associations (IPAs) sponsored by commercial insurers have adopted the RVS. In Washington State, Medicaid, the state workers' compensation program, the state employees' program, and a BCBS plan are using it.

PRIVATE PAYERS

Private payers, concerned with controlling the growth of overall expenditures and maintaining high physician participation rates across all specialties, see Medicare's RVS as a way to gain more control over the structure of their payments than they had in purely charge-based systems. The RVS gives payers control over the relative relationships among fees for different services. Private payers believe that equity in relative payments for services can help increase physician participation rates.

In general, more BCBS plans than commercial insurers have adopted payment policies that are consistent with the Medicare Fee Schedule. Participating provider agreements have facilitated BCBS plans' efforts to revise their payment methods. Each year, increasing numbers of physicians have signed participating physician agreements with BCBS plans. Through these agreements, plans establish the terms for payment and physicians relinquish the right to balance bill. Commercial insurers have been less aggressive in revising their payment methods because they do not have such agreements, except in preferred provider organizations and individual practice associations. According to the Deloitte and Touche survey, 80 percent of responding BCBS plans were using Medicare's RVS, but only 49 percent of IPAs, 37 percent of PPOs, and 19 percent of indemnity insurers were doing so (McCormack 1993).[1]

Strategies for Adopting Medicare's Relative Value Scale

Two basic strategies are followed by those private payers that use Medicare's RVS. Under the first strategy, a payer uses it to create or update a fee schedule. Under the second, a payer integrates the RVS into its customary, prevailing, and reasonable payment system.[2] Of those insurers that have adopted the RVS and were contacted by the Commission, the majority of BCBS plans and companies offering PPO and IPA products have modified their payment systems using the first strategy. Payers generally use the second strategy for their traditional indemnity products.

Regardless of which strategy is used, private payers have retained some of their previous payment policies. For example, private payers had existing policies to pay separately for the

[1] Due to low response rates for some categories, these percentages should be viewed with caution. For example, although there are 73 BCBS plans operating in the United States, only 24 responded to the Deloitte & Touche survey.

[2] Under CPR, payment for each service is limited to the lowest of (1) the physician's actual charge, (2) the physician's customary charge for that service, or (3) the prevailing fee for that service in the community.

interpretation of electrocardiograms (EKGs). After adopting Medicare relative value units for visits and consultation codes, some still paid separately for interpreting EKGs.[3] This distorted their relative payments, potentially adversely affecting incentives for more effective medical practice.

Insurers have also used Medicare's RVS to price new codes, especially the new evaluation and management (EM) codes or new codes for which charge profiles did not exist. In the case of the new EM codes, new definitions and distinctions between the levels of visits made it particularly difficult to know how to value one visit code versus another. Medicare's RVS provided payers with a guide.

Use in Fee Schedule. The first strategy replaces an insurer's existing fee schedule or CPR system with a fee schedule based on published Medicare relative value units (RVUs). Payers using this strategy adopt Medicare's RVS along with their own conversion factor to determine a fee for each service.[4] Interviews with BCBS officials indicated that a growing number of plans are following this strategy. In these cases, plans are using fee schedules based on Medicare's RVS for their core fee-for-service products, such as participating physician networks and PPOs.[5]

Most BCBS plans that are changing to fee schedules based on the Medicare RVS are doing so over a period of several years. Several executives indicated that a transition was being used to maintain adequate physician participation levels. They expressed concern that if their plans went immediately to a schedule based completely on Medicare's RVS—which, if applied in a budget-neutral manner, would result in lower payment for some services—participation levels could be adversely affected.

One organization situated in Oregon that negotiates fee schedules with physicians and sells the panels to insurance companies operating in its state started using Medicare's RVS as the basis of its products' fee schedules in 1993. While these fee schedules are currently based on a complicated formula that will move the basis of payment from the California Relative Value

[3] The private payers with whom the Commission spoke were using the relative value units from the Medicare Fee Schedule for 1993. OBRA93 required the Health Care Financing Administration to make separate payment for EKG interpretations and to exclude the relative value units for EKG interpretations from the relative value units for visits and consultations. For the 1994 fee schedule, the Health Care Financing Administration will now make separate payment for EKG interpretations performed in conjunction with visits and consultations.

[4] Private payers generally are using budget-neutral conversion factors with Medicare's RVS so that total expenditures for physicians' services remain the same, while payments for individual services are changed.

[5] These products are characterized by various contractual agreements between the plans and physicians. Participating provider networks are defined as all physicians who see BCBS patients and who agree to accept the payments made by the plan (plus copayments by the patient) as payment in full for all services they perform. Preferred provider organizations are typically defined as a group of the participating physicians who have been selected by the plan (e.g., theoretically on the basis of their efficiency) and who agree to offer their services at a discount in return for an increased volume of patients.

Scale (which is not resource based) to the Medicare RVS, by 1996 fees will be solely based on the Medicare RVS.

One way in which a private payer's fee schedule can move toward Medicare's RVS is through selective identification of overvalued and undervalued services. One BCBS plan recently revised the fee schedule of its PPO product by comparing current fee schedule prices to RVS-based prices. The RVS-based prices were calculated by multiplying Medicare RVUs with a conversion factor designed to produce about 4 percent in savings. Existing fees that were more than twice the level of RVS-based fees were reduced to 200 percent of the RVS fees. Conversely, prices that were less than 100 percent of the RVS-based prices were brought up to RVS-based prices. Because this was a one-time exercise, the plan's fee schedule will remain a blend of RVS-based fees and fees based on historical charges.

Another BCBS plan recently replaced its participating provider network fee schedule, based on historical charges, with one based on Medicare's RVS, but only for certain services. All payments for procedures, which account for 50 percent to 60 percent of the participating provider network's total expenditures, are now based on Medicare RVUs with a budget-neutral conversion factor. In addition, Medicare RVUs will also be used for all new and revised Current Procedural Terminology (CPT) codes. Payments for nonprocedural services will continue to be based on historical charges. Over time, a greater percentage of the fee schedule will be based on the RVS, even though it is not the plan's explicit goal to do this for all services.

Use in CPR System. The second strategy keeps elements of the CPR system but replaces prevailing charge screens (or maximum allowable charge amounts) with a screen based on Medicare's RVS. For services considered overvalued by the RVS, the new screen reduces the amount an insurer will pay. For services such as visits, whose relative values were increased by Medicare's RVS, the new screen raises the maximum amount the insurer will pay. Since the CPR methodology is not completely abandoned, however, the customary charge screen limits the payment to the physician.

One permutation of the second strategy is to use the RVS selectively to identify and adjust overvalued or undervalued services. Charge screens are modified to lower or raise the payment for these services accordingly. Executives from several BCBS plans described how their plans froze fees for all services for a year and then incrementally increased the maximum allowable charge only for those services considered undervalued by the Medicare RVS.

Barriers to Adoption

Commercial insurers face various barriers to further incorporating Medicare's payment policies into their existing payment systems. Except for their PPO and IPA products, commercial insurers generally do not have agreements with physicians. Without contracts,

insurers cannot by themselves enforce balance billing and therefore are unable to protect patients from increased out-of-pocket costs. While the Congress has given Medicare and Medicaid the legal authority to impose limits on physicians' charges, private insurers do not have this authority unless physicians accept such limits as part of a contractual agreement.

Another consideration for commercial insurers is that, unlike BCBS plans, their operations are not limited to one geographic area. The executives interviewed explained that this adds a layer of complexity to the adoption of fee schedules based on Medicare's RVS. This is because adjustments for geographic differences in practice costs are necessary. Most executives believe the geographic adjusters used currently by Medicare are not as accurate in their specific market areas as the charge profiles they have developed.

MEDICAID PROGRAMS

Twelve state Medicaid programs have adopted Medicare's relative value scale, and 8 others have decided to implement it in the near future. Together, these 20 programs account for almost half of national Medicaid spending for physicians' services.[6] Seven additional states are seriously exploring the application of the RVS but have not officially decided whether to adopt it (Table A-1).

The Commission's 1994 survey found that the majority of state Medicaid programs that have adopted, or will soon adopt, Medicare's RVS had payment rates below the average Medicaid program. State Medicaid programs, on average, pay 73 percent of Medicare's allowed charges (see Chapter 18). Of the 20 programs that have adopted the RVS (or will), only 8 paid at or above the Medicaid national average. The Commission's 1993 survey found that of the nine programs that had already adopted the RVS or planned to do so, slightly more than half paid above the national Medicaid average. It is unclear whether there is any relationship between level of payment and adoption of Medicare's RVS.

The following sections outline why states are (or are not) adopting the RVS and ways in which states' fee schedules differ from the Medicare Fee Schedule. Common reasons for adopting Medicare's RVS include increased equity and fairness among physicians, improved patient access to primary care services, and administrative simplification. These states have made some technical changes to policies of the Medicare Fee Schedule to account for their own circumstances. It is important to recognize, however, that the majority of Medicaid programs have not adopted Medicare's RVS. Reasons for this range from focusing staff resources on encouraging capitated care over fee-for-service payment to general ambivalence about changing their existing payment method.

[6] Another state, Maine, does not use published Medicare relative value units, but rather calculates Medicaid payment rates by considering the work component weights from an earlier study by Hsiao and his colleagues at Harvard University to derive set dollar amounts. These dollar amounts are updated each year based on state legislative allocations.

Table A-1. State Medicaid Programs in Various Stages of Implementing Medicare's Relative Value Scale

Already Implemented (Year)	To Be Implemented Soon (Year)	Actively Exploring Application
Arizona[a] (1992)	Alaska (1994)	Idaho
Georgia (1992)	Connecticut (1995)	Kentucky
Massachusetts [b] (1992)	Florida (1994)	Missouri
Michigan[c] (1992)	Indiana (1994)	New York
Mississippi (1992)	Minnesota (not sure)	North Dakota
North Carolina (1993)	Ohio (1994)	South Dakota
Oklahoma (1992)	Utah (1994)	Virginia
Oregon (1993)	West Virginia (1994)	
Rhode Island (1993)		
South Carolina (1993)		
Texas (1992)		
Washington[b] (1993)		

SOURCE: Physician Payment Review Commission's February 1994 survey of the Medicaid programs of the 50 states and the District of Columbia. All programs responded to the survey.

[a] In Arizona, the Relative Value Scale (RVS) is used to pay for the care of patients not in capitated care arrangements and patients who are eligible but not yet enrolled in an such an arrangement.

[b] Massachusetts and Washington are both moving to an RVS-based fee schedule. Their current fee schedules are partially based on historical charges.

[c] When adopting the RVS, Michigan held all services harmless, preventing RVS-based payments from falling below pre-RVS levels. A higher conversion factor of $24.80 is used when the overall $19.40 conversion factor would result in payments below the pre-RVS levels.

Reasons for Adopting Medicare's Relative Value Scale

The use of Medicare's RVS addresses existing imbalances in payment levels. It increases relative payments for EM services. Medicaid payments for all services historically have been substantially lower than the payments of other payers and especially low for EM services. These low EM payments are regarded as a major access barrier for Medicaid beneficiaries. Medicare's RVS provides a way for Medicaid programs to redistribute scarce dollars. By adopting the RVS and reallocating payments toward EM services, Texas, for example, is now spending 34 percent more for all EM services.

Another benefit of using Medicare's RVS is that it offers Medicaid programs a way to decrease the administrative costs associated with updating their fee schedules. Instead of revising relative values themselves, states can take advantage of the work the Health Care

Financing Administration (HCFA) puts into developing and revising the RVS. By making their payment system more like Medicare's, states can update their fee schedules simply by changing the conversion factor and incorporating other HCFA changes, such as new and revised relative values. HCFA's methods of making budget neutrality adjustments have been a problem, however (see Chapter 20).

Differences from the Medicare Fee Schedule

The major difference between the Medicare Fee Schedule and adopting states' fee schedules has to do with the number and level of conversion factors each applies to the Medicare RVS. State Medicaid programs incorporating the Medicare RVS into their payment policies generally have separate conversion factors for obstetric, and in some cases, pediatric services.[7] They also generally pay less overall than does Medicare. Only one adopting state, Mississippi, uses all of Medicare's relative value units with the state's single conversion factor.

Every other state that has adopted Medicare's RVS uses a higher conversion factor, or in the case of Rhode Island, bonus payments, to pay relatively more for obstetric services than most other services. Oregon, for example, has two conversion factors in 1994, $27.00 for obstetric services and $23.75 for all other services.

States are using a separate conversion factor for obstetric services because they believe that the Medicare RVUs for obstetric services are too low to use with their overall conversion factors, regardless of which version of the fee schedule is used. Total Medicare RVUs for obstetric services were increased by HCFA for both 1993 and 1994.[8] States continue to believe that payments must be higher than those derived from using Medicare's RVUs and their overall conversion factor in order to ensure access to obstetric services and to obtain approval under the equal access requirement of OBRA89.[9] When one state tried to use the 1992 obstetric RVUs with its overall conversion factor, HCFA denied the state's equal access plan on the grounds that its payment rates for these services would be too low.

A few states have made similar provisions for certain pediatric services, such as pediatric office visits. Washington State, for example, developed separate conversion factors for obstetric ($43.97) and pediatric EM services ($37.60) and changed Medicare RVUs for several services.

[7] The Medicare Fee Schedule for 1994 will have three conversion factors: surgical, primary care, and other nonsurgical services.

[8] The total RVUs for a normal delivery (CPT 59400), for example, went up from 26.10 RVUs in 1992 to 37.03 in 1993 to 39.89 in 1994.

[9] Under OBRA89, state Medicaid programs must submit documentation to HCFA each April demonstrating that payment levels for pediatric and obstetric services are sufficient to ensure access (see Chapter 18).

To ensure access to obstetric and pediatric services, many of these states had raised payments for those services before adopting the Medicare RVS. Medicaid fees for deliveries are on average nearly at Medicare levels (97 percent), while Medicaid fees for other groups of services (office visits, consultations, psychological services, emergency room visits, and surgeries) range from 55 percent to 78 percent of Medicare levels (see Chapter 18). Obstetric and pediatric services are of particular concern to Medicaid programs because the programs primarily cover women and children. In the Texas Medicaid program, for example, normal obstetric care is projected to account for 25 percent to 30 percent of state fiscal year 1994 expenditures for physicians' services.

States must also make allowances for Medicaid services that are not covered by Medicare or are rarely furnished to Medicare beneficiaries and consequently have no relative values. These include pediatric surgical procedures; most states adopting the RVS have kept their existing payment methodology for these services.

State programs adopting Medicare's RVS are also making other changes to the policies of the Medicare Fee Schedule. A transition period is being used by only two states, Massachusetts and Washington. In addition, although the Medicare program uses geographic adjusters to pay different amounts to physicians in different parts of some states, all states using the RVS have one fee schedule for the entire state.

States Not Adopting Medicare's Relative Value Scale

A total of 24 Medicaid programs that currently use a CPR system or have fee schedules based on other relative value scales, such as the California RVS and McGraw-Hill (both of which are not resource based), were not interested in adopting Medicare's RVS. The reasons for this lack of interest vary. Several nonadopting states indicated they had plans to enroll most beneficiaries in capitated arrangements and thus had no reason to use Medicare's RVS. Tennessee, which was identified in last year's report as actively exploring application of the RVS, decided recently to enroll all beneficiaries into managed-care plans through its new TennCare program. One state considered abandoning its CPR system and adopting Medicare's RVS. Because of political pressure from local physicians, it instead agreed to pay at 66 percent of the local BCBS plan's fee schedule, which is only partially based on Medicare's RVS.

Several nonadopting states have used Medicare's RVS as a tool to help them update their fee schedules. Nevada, which had been listed in the Commission's 1993 annual report as actively exploring whether to apply the RVS, decided to use it only as a resource to review what its program should pay for new CPT codes. In addition, two states use Medicare rates to establish maximum allowable amounts for their CPR systems.

HCFA and States

In its *Annual Report to Congress 1993* the Commission noted that HCFA could assist state efforts substantially by coordinating the activities of states interested in the RVS. In 1993, HCFA's Medicaid bureau began such an effort by convening HCFA personnel and state Medicaid officials to exchange information about using the RVS. In addition, the Medicaid bureau solicited the input of states that have adopted the RVS regarding the need to revise and update the RVS for HCFA's broader effort to refine and complete the Medicare Fee Schedule.

Some states have taken advantage of the opportunity to learn from one another. In the Commission's 1993 survey of Medicaid programs, several states indicated that they were interested in exploring the advantages and disadvantages of adopting Medicare's RVS but were not aware of other states that had already adopted it. By contrast, in the 1994 survey, several states indicated that they were actively seeking information from other states about Medicare's RVS. In fact, two of these states in 1993 conducted their own survey of Medicaid programs to find out which ones were using Medicare's RVS and to learn what changes adopting states made to the Medicare Fee Schedule (such as number of conversion factors).

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APPENDIX B

SURVEYS OF BENEFICIARY COMPLAINTS

This appendix provides details on two surveys of beneficiary complaints. The first is the Commission's mail survey of all 540 U.S. congressional offices. The second is a survey of members of the American Association of Retired Persons (AARP) who read its monthly publication, the *Bulletin*.

PPRC SURVEY OF THE CONGRESS

Previous work by the Commission suggested that the Congress received relatively few complaints from beneficiaries about access to care. In mid-1992, the Commission conducted an informal telephone survey of congressional offices in the 10 states having the most Medicare enrollees. Legislative assistants for all senators and a sampling of representatives were asked about the volume of letters from Medicare beneficiaries complaining about poor access to care.

In general, this survey showed very few or no complaints regarding access to care. That survey identified small increases in complaint volume in urban areas of Florida and Texas, and a significant rise in the number of complaints from northeastern rural California. In a follow-up survey, members of Congress from the affected districts reported that complaints from Medicare beneficiaries had virtually ceased by January 1993.

In 1993 the Commission broadened its strategy for monitoring access to care by expanding the scope of its survey to include all congressional offices. In late 1993, Commission staff mailed surveys to all 540 U.S. congressional offices (100 senators, 435 representatives, 4 delegates, and 1 resident commissioner). A cover letter to each office's chief of staff requested that the survey be directed to the staff person most likely to deal with complaints from Medicare beneficiaries. The respondents were asked about the volume of letters from Medicare beneficiaries complaining they could not find a physician who would accept them, and whether the number of complaints had increased since January 1992. Additional questions addressed the type and nature of these complaints. Offices that did not respond to the first survey were sent a follow-up request.

Results

Overall, 256 congressional offices responded to the survey. This 47 percent response rate is quite high for a survey of this nature. Of the respondents, fewer than half, 42 percent, had received letters from Medicare beneficiaries complaining that they have had difficulty in finding a

physician who accepts Medicare patients. Of those offices that received complaints, a significant majority, 71 percent, received 5 or fewer in any typical month. Only a handful (5 in all) had received between 11 and 25 complaints per month, and just 2 offices had gotten more than 25 complaints per month (Table B-1). The weighted mean of the complaint rate for the districts responding to this survey was one letter per year for every 4,000 Medicare beneficiaries.

Table B-1. Complaints Received by Congressional Offices Concerning Problems with Access

Complaints per Month	Number of Offices	Percentage of Offices
None	148	57.8
1-5	77	30.1
6-10	24	9.4
11-25	5	1.9
26-50	1	0.4
More than 50	1	0.4
Total	256	

SOURCE: Physician Payment Review Commission 1993 survey of congressional offices.

Of those offices that received complaints and where the members were incumbents, 30 percent said the number of complaints had increased compared with last year, while 6 percent said it had decreased. The majority, 64 percent, indicated that the number of complaints received over last year remained about the same. On average (weighted by the number of enrollees), there was a very slight increase in the number of complaints received in 1993 versus 1992.

Those who received beneficiary complaints were asked to indicate the type of physician(s) most often cited in such complaints. The data show that nearly two-thirds of the most commonly mentioned specialties were primary care physicians. Family and general practitioners and internists were listed much more frequently than any other specialty as the focus of most beneficiary complaints (Table B-2).

NOVEMBER AARP READERSHIP SURVEY

In September 1993, the Commission began a cooperative effort with the AARP to field and analyze responses to a short questionnaire published in the November 1993 AARP *Bulletin*. The *Bulletin* is a monthly magazine that reaches roughly 15 million Medicare beneficiaries. Instructions on the questionnaire asked for Medicare beneficiaries who have had difficulty finding a physician to complete the short survey and return it to the AARP.

Table B-2. Specialty Most Often Mentioned in Complaints to Congressional Offices About Access

Specialty	Number of Times Mentioned
Family or general practice	17
Internal medicine	9
Specialist	4
Obstetrician/gynecologist	2
Ophthalmologist	2
Dentist	2
Other	3

SOURCE: Physician Payment Review Commission 1993 survey of congressional offices.

The potential problems with a survey of this type are fairly clear. AARP members may not be representative of Medicare beneficiaries as a whole. In addition, these data are self-reported and reflect only those beneficiaries who saw and were willing to respond to the questionnaire. The response rate from this survey, therefore, should be viewed primarily as an indicator of the level of complaint, not as an indicator of the level of access problems.

Results

The principal conclusion from this survey is that the response rate was essentially zero; fewer than 1800 responses were received from the more than 15 million Medicare beneficiaries on the Bulletin mailing list. This is a response rate of only one beneficiary in approximately 8,000. Given this low overall response rate, no detailed quantitative analysis of the data (for example, response rates by state) has been attempted.

Complaints about access were concentrated among beneficiaries who needed to establish a new physician relationship (Table B-3). Beneficiaries who had recently moved or whose physician moved or retired account for nearly 80 percent of the responses. Inability to find a specialist was noted on roughly half of responses. Only 20 percent of respondents indicated that their physician broke an existing relationship because the individual was insured by Medicare.

Primary care is the core of the access issue in this context. About 60 percent of respondents mentioned primary care physicians (general practice, family practice, internal medicine) as the type of physician they were trying to find. The subspecialty mentioned most frequently was cardiology, accounting for just 4 percent of responses.

Finally, complainants attributed their problems to being Medicare beneficiaries, and not to mobility problems or to a lack of physicians in their localities. As noted above, however, that may be a result of this type of survey.

Table B-3. Responses to the American Association of Retired Persons *Bulletin* Readership Survey on Access to Care

Responses	Number of Responses	Percentage
Question 1: Which of the following best describes your situation?		
I just moved to the area and can't find a physician.	595	38
My doctor retired or moved away.	634	41
My doctor will no longer treat me because I am a Medicare beneficiary.	303	20
I can't find a specialist willing to treat Medicare patients.	756	49
Missing/no answer	69	11
Question 2: What kind of doctor are you trying to find?		
General practice/family practice/primary care	734	47
Internal medicine	208	13
Cardiologist	55	4
Gynecologist	38	2
Dermatologist	30	2
Question 3: Check any of the reasons why you cannot find a physician to treat you:		
I am a Medicare patient.	1258	81
I cannot travel a great distance to see a doctor.	655	42
The kind of specialist I need is not available in my town.	360	23
Physicians are not accepting Medicare patients.	206	13
Physicians are not taking new patients.	165	11

SOURCE: Physician Payment Review Commission analysis of American Association of Retired Persons 1993 survey data.

NOTES: Percentages may exceed 100 because beneficiaries gave more than one answer. Specialty categories were assigned from open ended answers provided by respondents.

Taken with the results from the survey of congressional offices, these results paint a very reasonable picture of the typical problem generating these complaints. Beneficiaries who are in an ongoing physician relationship appear to be the least at risk for loss of access. Once that relationship is broken, however, finding a new primary care physician may be difficult. Because Medicare payment rates for these physicians have been rising on average, these problems are not likely to be the result of changes brought about by the Medicare Fee Schedule per se. Instead, Medicare access problems may be the result of the overall shortage of primary care physicians coupled with relatively low Medicare payment rates. In these cases, relatively lower-paying Medicare patients may have difficulty finding their way onto the schedules of already fully booked primary care physicians.

APPENDIX C

COMMISSION RESPONSIBILITIES MANDATED BY THE CONGRESS, 1985 TO 1994

The Physician Payment Review Commission was established by the Congress through the Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272). It was charged with advising and making recommendations to the Congress on methods to reform payment to physicians under the Medicare program. Recommendations are to be submitted to the Congress no later than March 1 (amended to March 31 by the Omnibus Budget Reconciliation Act of 1987 [OBRA87], P.L. 100-203) of each year.

The legislation identified eight specific areas that the Commission should address in its recommendations to the Congress, including the feasibility of reducing specialty and geographic differences in payments, increasing physician participation in the Participating Physician and Supplier Program, the feasibility of physician diagnosis-related groups, and the appropriate use of assistants-at-surgery. The legislation also required that the Commission advise and make recommendations to the Secretary of Health and Human Services (HHS) regarding the development of a resource-based relative value scale for physicians' services.

In the Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647), the Congress further specified that the Commission consider policies for moderating the rate of increase in physicians' expenditures and utilization of physicians' services.

With the passage of physician payment reform legislation in the Omnibus Budget Reconciliation Act of 1989, the Commission was assigned the following new responsibilities: advising the Congress on setting standards for expenditure growth and updating fees; commenting on reports by the Secretary on issues related to utilization, access, and assignment policy; and conducting a series of mandated studies. These studies included payment for practice expenses, geographic payment areas, payment for nonphysician practitioners, physician payment under Medicaid, and payment for assistants-at-surgery.

The Congress further revised the Commission's responsibilities as part of OBRA90. It repealed the requirements relating to the development of the relative value scale, while expanding the Commission's responsibilities in other areas. OBRA90 requires the Commission is to consider a wide range of Medicare policies. Among these are:

- major issues in implementation of the Medicare Fee Schedule;
- further development of the Volume Performance Standard system, including development of state-based programs;

- payment incentives to increase access to primary care and other services in inner-city and rural areas, including federal policies regarding the level of Medicaid payments to physicians;
- the supply and specialty distribution of physicians and financing of graduate medical education;
- utilization review and quality of care, including the effectiveness of Peer Review Organizations and other quality assurance programs;
- options to constrain the costs of health care to employers, including incentives under Medicare;
- medical malpractice reforms; and
- physician licensing and certification.

The Commission is also required to comment on the President's budget recommendations affecting physician payment under Medicare.

APPENDIX D

BIOGRAPHIES
COMMISSION MEMBERS

JOHN M. EISENBERG

John M. Eisenberg, M.D., M.B.A., is Chairman of the Department of Medicine, Physician-in-Chief, and Anton and Margaret Fuisz Professor of Medicine at Georgetown University Medical Center. He is a graduate of the Washington University School of Medicine, St. Louis. After his residency in internal medicine at the Hospital of the University of Pennsylvania, Dr. Eisenberg was a Robert Wood Johnson Foundation Clinical Scholar and earned a master's of business administration degree at the Wharton School. He served as Chief of the Division of General Internal Medicine at the University of Pennsylvania from 1978 to 1992 and was Sol Katz Professor of General Internal Medicine. Dr. Eisenberg has been a member of the Physician Payment Review Commission since 1986 and was named Chairman of the Commission in 1993. He served as President of the Society for General Internal Medicine, and Vice President of the Society of Medical Decision Making. He was the first physician to be President of the Association for Health Services Research. Dr. Eisenberg is a member of the Board of Regents of the American College of Physicians and served on the board of the Association of Program Directors in Internal Medicine. From 1986 to 1993, he was on the Board of Directors of the American Board of Internal Medicine, and was elected to its Executive Committee for 1992-1993. He has been elected to membership in an number of honorary professional societies and in 1993 was named Distinguished Internist of the Year by the American Society of Internal Medicine. Dr. Eisenberg has been a consultant to and member of editorial boards of several major medical and health policy journals. He has published more than 180 articles and book chapters on topics such as physicians' practices, test use and efficacy, medical education, and clinical economics. He is the author of *Doctors' Decisions and the Cost of Medical Care* and a coauthor of the 1992 book, *Paying Physicians*.

LINDA H. AIKEN

Linda H. Aiken, Ph.D., is Trustee Professor of Nursing; Professor of Sociology; Director of the Center for Health Services and Policy Research; and Senior Fellow, Leonard Davis Institute for Health Economics at the University of Pennsylvania. Before joining the University faculty in 1988, she was Vice President of The Robert Wood Johnson Foundation for 13 years. Dr. Aiken is a frequent adviser to federal and state policymakers. She is the author of numerous scientific and policy papers on access to and the organization and financing of health services, particularly AIDS care and health manpower policy. Dr. Aiken is

a member of the Institute of Medicine of the National Academy of Sciences and the National Academy of Social Insurance. A former President of the American Academy of Nursing, Dr. Aiken was also a member of the 1982 Social Security Advisory Council. She has served on national advisory groups on the organization and financing of long-term care for the elderly. She received nursing degrees from the University of Florida at Gainesville, and a doctorate in sociology and demography from the University of Texas at Austin.

RICHARD V. (DICK) ANDERSON

Richard V. (Dick) Anderson is Vice President, Marketing Support, for the Kaiser Permanente Medical Care Program. His responsibilities include marketing services for national employers, product development and planning, market research and analysis, pricing and benefit design, and insurance services. During his 25-year involvement with Kaiser Permanente, he has also provided technical support for health services research, as well as data analysis and reporting. He actively represents Kaiser Permanante in relations with employers, health benefits consultants, business coalitions, government agencies, and other external organizations. He has been especially active in committees and work groups of the Group Health Association of America and Washington Business Group on Health. Mr. Anderson received his bachelor of science degree from Washington State University and his master's of public health at the University of California, Berkeley. He also completed Harvard Business School's Advanced Management Program and has attended the University of Washington. A member of the Physician Payment Review Commission since 1990, he was interim Chairman in 1993.

P. WILLIAM CURRERI

P. William Curreri, M.D., is President of Stratagem of Alabama, Inc., an international health care marketing and consulting firm. Dr. Curreri has served as Professor, Chairman, and Chief of Surgery at the University of South Alabama in Mobile. He was also on the faculty of the University of Washington School of Medicine in Seattle, and was named the Johnson & Johnson Professor of Surgery while on the faculty of Cornell Medical Center in New York. A member of numerous professional societies and organizations, Dr. Curreri is a former President of the American Burn Association, the Society of University Surgeons, the Halstead Society, and the American Association for the Surgery of Trauma. Author of numerous articles on surgery, Dr. Curreri is a consultant to and member of the editorial boards of several major surgical and burn care journals. He is past Editor-in-Chief of *The American Surgeon*. Dr. Curreri has been a frequent adviser to the National Institutes of Health and was a member of the Institute's Surgery, Anesthesia, and Trauma Study Section from 1980 to 1988, and was its chairman from 1986 to 1988. He is a member of the American Board of Surgery and is a former member of the Executive Committee of the Board of Governors of the American College of Surgeons, where he was Secretary from 1987 to 1989.

Dr. Curreri received his medical degree from the University of Pennsylvania and completed his surgical residency at the Hospital of the University of Pennsylvania.

KAREN DAVIS

Karen Davis, Ph.D., is Executive Vice President of The Commonwealth Fund. Positions previously held by Dr. Davis include Chairman of the Department of Health Policy and Management in the School of Hygiene and Public Health, The Johns Hopkins University; Deputy Assistant Secretary for Planning and Evaluation/Health, U.S. Department of Health and Human Services; Administrator of the Health Resources Administration, U.S. Public Health Service; Senior Fellow at the Brookings Institution: Visiting Lecturer, Harvard University; and Assistant Professor, Rice University. Dr. Davis is a member of the New York Governor's Task Force on Health Care Reform; the Institute of Medicine; the New York Academy of Medicine; the Kaiser Commission on the Future of Medicaid; the U.S. General Accounting Office Comptroller General's Health Advisory Committee; the Board of the Association for Health Services Research; the Board of Directors of the Primary Care Development Corporation; and the Board of Directors, Somatix Therapy. She also served as Director of The Commonwealth Fund Commission on Elderly People Living Alone. Dr. Davis is the author of numerous books and articles on health economics and policy analysis, including *Health Care Cost Containment; Medicare Policy: New Directions for Health and Long-Term Care; Health and the War on Poverty: A Ten-Year Appraisal;* and *National Health Insurance: Benefits, Costs, and Consequences*. Dr. Davis received her doctorate in economics from Rice University.

ANNE B. JACKSON

Anne B. Jackson is a member of the National Legislative Counsel of the American Association of Retired Persons and serves as chairperson of the Health and Future Generations Committee. A registered nurse for 45 years, she retired in 1989. Mrs. Jackson was a Professor in the Department of Nursing at City University of New York, and served in the positions of Medical Supervisor, Head Nurse, and Staff Nurse for the Veterans Administration (now the Department of Veterans Affairs). Mrs. Jackson received her bachelor's degree in education from Hunter College, and her master's in nursing administration from Columbia University Teachers College. She also completed further studies at Teachers College.

ROBERT B. KELLER

Robert B. Keller, M.D., an orthopaedic surgeon, is Executive Director of the Maine Medical Assessment Foundation, a health services research organization. He graduated from

Dartmouth College and received his medical degree from Cornell Medical School. After serving in the U.S. Navy, he undertook training in orthopaedics in the Harvard Medical School Combined Residency Program. He is an Adjunct Professor of Community and Family Medicine and Surgery in the Dartmouth Medical School and Associate Clinical Professor of Orthopaedic Surgery at the University of Massachusetts Medical School. A member of numerous professional societies, he serves on the Council on Research and the Council on Health Policy and Practice of the American Academy of Orthopaedic Surgeons, and chairs the Academy's Committee on Outcomes Studies. He has published articles and book chapters on the subject of small area analysis, physician feedback and behavior change, outcomes research, and other topics. Dr. Keller is principal investigator of an Agency for Health Care Policy and Research-funded project focusing on information dissemination and physician behavior change in northern New England, and is co-investigator of a medical effectiveness Patient Outcome Research Team (PORT) evaluating low back pain and surgical outcomes and part of a National Institutes of Health-funded outcomes study of carpal tunnel syndrome. Dr. Keller is past President of the Maine Medical Association and a member of the Board of Directors of Medical Mutual Insurance Company of Maine. He is Vice Chairman of the Physician Payment Review Commission.

PATRICIA M. NAZEMETZ

Patricia M. Nazemetz is Director of Benefits for Xerox Corporation in Stamford, Connecticut. Her responsibilities include the design, development, and operation of the company's U.S. benefit plans and programs. She joined Xerox in 1979 as Benefits Operations Manager and has held several subsequent positions in the benefits department. She assumed her present position in 1988. Before joining Xerox, she worked for W.R. Grace & Co. Ms. Nazemetz serves as a Director on the boards of the Kaiser Health Plan of New York, the Matthew Thornton Health Plan, and the Washington Business Group on Health. She currently chairs the board of the National Committee for Quality Assurance. She was formerly chair of the Corporate Board of the International Foundation of Employee Benefit Plans. She is also a member of the Academy of Women Achievers of the YWCA of New York City.

JOSEPH P. NEWHOUSE

Joseph P. Newhouse, Ph.D., is the John D. MacArthur Professor of Health Policy and Management at Harvard University, with appointments on the faculties of the John F. Kennedy School of Government, the Harvard Medical School, the Harvard School of Public Health, and the Faculty of Arts and Sciences. He was the founding editor and continues to edit the *Journal of Health Economics* and is an Associate Editor of the *Journal of Economic Perspectives*. He is the current President of the Association for Health Services Research and serves on the Governing Council and Executive Committee of the Institute of Medicine. He spent the first 20 years of his career at RAND, where he was the principal investigator

for the RAND Health Insurance Experiment. He has received the Distinguished Investigator Award from the Association for Health Services Research, the David N. Kershaw Award and Prize from the Association for Public Policy and Management, the Baxter American Foundation Prize, and the Administrator's Citation from the Administrator of the Health Care Financing Administration. He received his doctorate in economics from Harvard University.

THOMAS R. REARDON

Thomas R. Reardon, M.D., currently serves on the American Medical Association (AMA) Board of Trustees. In addition to his activities in organized medicine at the county, state, and national level, Dr. Reardon has maintained a busy general practice in Portland, Oregon, for 28 years. Before being elected to the Board of Trustees, Dr. Reardon represented the Hospital Medical Staff Section in the AMA House of Delegates and served on the AMA Task Force on Physician Manpower. Dr. Reardon began his activities in medical politics with the Multnomah County Medical Society, where he was President from 1980 to 1981. He later held the offices of Vice President and then President of the Oregon Medical Association (OMA). He served as Chairman of the OMA Committee on Private Practice and Hospital Relations and the Committee on Health Planning. He was also a member of the OMA Legislative Committee and Board of Censors and Ethics Committee. In addition to his involvement with organized medicine, Dr. Reardon has served on various community-based task forces to study health care for the medically indigent. He is active in issues affecting the elderly and participated on Congressman Ron Wyden's Task Force on Medicare Reimbursement. Dr. Reardon received his medical degree from the University of Colorado School of Medicine.

UWE R. REINHARDT

Uwe R. Reinhardt, Ph.D., is James Madison Professor of Political Economy at Princeton University, where he has been teaching since 1968. Professor Reinhardt was a member of the National Leadership Commission on Health. He has served on several councils and task forces, including the Governing Council of the Institute of Medicine of the National Academy of Sciences; the National Health Care Technology Council of the Department of Health, Education, and Welfare; and the Veterans Administration's Special Medical Advisory Group. He also served as President of the Association for Health Services Research and on the editorial boards of a number of major health policy and economic journals. Professor Reinhardt is the author of *Physician Productivity and the Demand for Health Manpower,* as well as numerous articles on health economics, accounting, and corporate finance. These works include a financial analysis of the Lockheed L-1011 Tri-Star, a cost-benefit analysis of the space shuttle project, and pricing strategies for the space shuttle. Dr. Reinhardt's consulting activities have included work for the Department of Health and Human Services,

Mathematica Policy Research, the Urban Institute, and Econ Incorporated. He has been a consultant in management training, primarily in managerial economics and corporate finance, for several major corporations. He received his doctorate in economics from Yale University and an honorary doctorate from the Medical College of Pennsylvania in 1987.

EARL P. STEINBERG

Earl P. Steinberg, M.D., M.P.P., is a Professor of Medicine at The Johns Hopkins University School of Medicine and has a joint faculty appointment to the Department of Health Policy and Management of the School of Hygiene and Public Health. Dr. Steinberg also serves as Director of The Johns Hopkins University Program for Medical Technology and Practice Assessment. His research focuses on technology assessment, the cost and effectiveness of alternative patterns of medical practice, methods for evaluating the quality of care, and the clinical and economic impacts of health care payment innovations. Dr. Steinberg is the Principal Investigator on a federally funded Patient Outcome Research Team (PORT) that is evaluating variation in management of cataracts and its relationship to patient outcomes. He also serves as a member of the National Blue Cross Blue Shield Association's Medical Advisory Panel, which performs technology assessments for the Association. Dr. Steinberg is a member of many professional societies and organizations, and serves as a reviewer for several major medical and health policy journals. He has received numerous awards, including the Henry J. Kaiser Family Foundation Faculty Scholar Award in General Internal Medicine (1984) and the Outstanding Young Investigator Award from the Association for Health Services Research (1988). Dr. Steinberg received his bachelor's degree from Harvard College, his medical degree from Harvard Medical School, and a master's of public policy from the Kennedy School of Government. He completed his residency in internal medicine at Massachusetts General Hospital.

PAUL B. GINSBURG, Ph.D., is the Executive Director. He has extensive experience with a wide range of health care financing issues, including physician payment, hospital payment, health insurance, and organized systems of care. He has written numerous scholarly articles and books on health care policy. Before joining the Commission at its inception in 1986, Dr. Ginsburg was a Senior Economist at RAND. He was Deputy Assistant Director for Income Security and Health at the Congressional Budget Office, where he prepared analyses for the Congress on federal health policy issues with significant budgetary implications. Dr. Ginsburg has served on the faculties of Duke University and Michigan State University. He earned a doctorate in economics at Harvard University in 1971.

LAUREN B. LeROY, Ph.D., is the Deputy Director. Before coming to the Commission, Dr. LeRoy served as Associate Director of The Commonwealth Fund Commission on Elderly People Living Alone. She spent 12 years at the Institute for Health Policy Studies, University of California, San Francisco, where she became Assistant Director and the Director of the Institute's Washington office. She also served as an analyst working on health issues in the Department of Health, Education, and Welfare. Dr. LeRoy's research interests and published work have focused on physician payment reform, physician training and practice, the nurse labor market, and health care for the elderly. She is a member of the National Academy of Social Insurance and serves on the editorial board for the Association for Health Services Research/Health Administration Press. She received her doctorate in social policy planning from the University of California, Berkeley.

KENNETH R. COHEN is an Analyst. He holds master's degrees from the University of Michigan in health services administration and in public policy. Previously, he worked for the Centers for Disease Control and Prevention. He also completed a management internship at Saint Joseph Mercy Hospital in Pontiac, Michigan, and an internship with the U.S. Senate Special Committee on Aging. His work at the Commission centers on the adoption of the Medicare Fee Schedule by Medicaid programs and private insurers, the establishment of physician fee schedules under health system reform, and federal and state reform proposals and initiatives.

DAVID C. COLBY, Ph.D., is a Principal Policy Analyst. He received his doctorate in political science from the University of Illinois. Previously, he held faculty and administrative positions at Williams College and the University of Maryland, Baltimore County. From 1986 to 1987, he was a Robert Wood Johnson Health Finance Fellow. At the Commission, he is focusing on access to care and quality of care under health system reform. He is also

analyzing access for Medicare and Medicaid beneficiaries, and physician responses to the Medicare Fee Schedule.

DONALD F. COX, Ph.D., is a Senior Analyst. He received a doctorate in economics from the University of Maryland. Before joining the Commission, Dr. Cox was a Senior Economist at the Federal Trade Commission and Fu Associates, Ltd. In addition, he has worked in the Occupational Safety and Health Administration and the Department of Defense. His work at the Commission involves analyses underlying the Commission's recommendations on annual Medicare fee updates and Volume Performance Standards, and preparation of the Commission's reports to the Congress on these issues.

CHRISTINE CUSHMAN is a Junior Analyst. She received her master's degree in public policy from Georgetown University. Her work at the Commission focuses on issues related to Medicare beneficiaries' access to care and health system reform.

ELIZABETH DOCTEUR is an Analyst. She received her master's degree in public policy analysis from the University of Rochester. She previously worked at Strong Memorial Hospital in Rochester, New York, where she also completed an internship in the Medical Center's Office of Strategic Planning. Her work at the Commission centers on quality assurance, coverage decisions, and technology assessment in the context of health system reform.

DONNA O. FARLEY, Ph.D., is a Senior Analyst. She received a doctorate in public policy from the RAND Graduate School. Before joining the Commission, she worked on RAND Medicare payment policy studies relating to hospital outlier payments and capitation payment for the End Stage Renal Disease Program. She brings more than 15 years of health care management experience to her health policy work, most recently serving as Senior Vice-President for planning and business development for Ancilla Systems Incorporated, a regional system of Catholic hospitals based in the Chicago area. Her work at the Commission involves issues related to Medicare managed care and design of payment methods for high-cost individuals.

LORI GRUBER is an Analyst. She received her master's degree in public policy and management from Carnegie Mellon University. She worked previously as a statistician for the Center for International Research, Bureau of the Census. Her work at the Commission focuses on access to care in Health Professional Shortage Areas and the role of nonphysician practitioners in health care delivery.

KEVIN HAYES, Ph.D., is a Senior Analyst. He received a doctorate in health policy and administration from University of North Carolina at Chapel Hill. He has worked as a health care planner for a local planning agency and for the Veterans Administration. His work at the Commission focuses on monitoring Medicare beneficiaries' access to care under the Medicare Fee Schedule.

ANNETTE B. HENNESSEY is the Executive Assistant. She received her bachelor's degree in political science from Mississippi State University in Starkville. Until joining the Commission, she worked for Senator Bill Bradley as a legislative secretary, primarily responsible for administration of his legislative staff. As assistant to the Executive and Deputy Directors, she coordinates all ongoing Commission activities.

JOHN F. HOADLEY, Ph.D., is a Principal Policy Analyst. He received his doctorate in political science from the University of North Carolina at Chapel Hill in 1979. Before joining the Commission staff, Dr. Hoadley was a Senior Research Associate at the National Health Policy Forum, where he was responsible for Forum sessions on health insurance, access, quality of care, and physician payment, among other issues. Previously, he served as a Legislative Assistant in the office of Representative Barbara B. Kennelly and was an American Political Science Association Congressional Fellow in 1983-84. Earlier, Dr. Hoadley taught political science at Duke University and at the State University of New York at Stony Brook. His current work at the Commission focuses on health system reform, especially issues related to cost containment, expenditure limits, risk adjustment, and data systems.

CHRISTOPHER HOGAN, Ph.D., is a Principal Policy Analyst. He holds a doctorate in economics from Northwestern University. Before joining the Commission staff in 1989, he worked at the National Center for Health Services Research and served as Senior Economist with the Consolidated Consulting Group. He was responsible for developing the Commission's reports on the Medicare Volume Performance Standard and on access to care for Medicare beneficiaries. He works on a variety of other topics, including the Medicare Fee Schedule conversion factor, physicians' responses to the fee schedule, private insurers' payment levels, and premium limits.

SHERAN ESTES McMANUS is the Administrative Officer. Having received her bachelor's degree from the University of Maryland, she continued her studies at the George Washington University in Washington, D.C.. She has more than 15 years of experience in program administration and management, primarily in programs dealing with health policy issues. She was previously Executive Associate of the George Washington University's National Health Policy Forum and served in various capacities at the Department of Health and Human Services. At the Commission, she is responsible for all financial management and administration. She also oversees the production of all Commission publications.

KATIE MERRELL is a Senior Analyst. She spends a portion of her time at the Center for Health Administration Studies, University of Chicago. Before joining the Commission staff, she worked at Abt Associates in its Health Economics Research and Income Support and Education areas. She was also a Research Assistant at the Board of Governors of the Federal Reserve System, and a high school mathematics and computer science teacher. Her work at the Commission has been on practice expense; geographic adjustment of the Medicare Fee Schedule; simulating the impact of policy changes on fee schedule payments; and several

health reform issues, including the structure of the health insurance market and community rating.

ANNE SCHWARTZ is a Senior Analyst. She holds a master's degree and is working toward a doctorate in health policy from The Johns Hopkins University. Previously, she worked as staff in the U.S. House of Representatives for the Select Committee on Children, Youth, and Families, and for Representative Claudine Schneider, where her work involved health, education, and child care issues. Her work at the Commission has addressed graduate medical education and physician supply, physician payment and access to care under Medicaid, access for the poor under health system reform, and beneficiary issues.

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APPENDIX E

COMMISSION PUBLICATIONS

ANNUAL REPORTS TO CONGRESS AND EXECUTIVE SUMMARIES

1987 through 1994

MANDATED REPORTS TO CONGRESS

The Costs of Providing Screening Mammography, No. 89-2 (June 1989)

Medicare Volume Performance Standard: Rate of Increase for Fiscal Year 1991, No. 90-1 (May 15, 1990)

Fee Update and Medicare Volume Performance Standards for 1992, No. 91-3 (May 1991)

Physician Payment under Medicaid, No. 91-4 (July 1991)

Monitoring Access, No. 91-5 (July 1991)

Optional Payment Rates for Physicians: An Analysis of Section 402 of H.R.3626, unnumbered (March 1992)

Monitoring the Financial Liability of Medicare Beneficiaries, No. 92-3 (May 1992)

Fee Update and Medicare Volume Performance Standards for 1993, No. 92-4 (June 1992)

Monitoring Access of Medicare Beneficiaries, No. 92-5 (June 1992)

Comments on the President's Budget for Fiscal Year 1993, No. 92-6 (June 1992)

Fee Update and Medicare Volume Performance Standards for 1994, No. 93-1 (May 1993)

Monitoring Access of Medicare Beneficiaries, No. 93-2 (June 1993)

Monitoring the Financial Liability of Medicare Beneficiaries, No. 93-3 (June 1993)

Comments on the President's Budget for Fiscal Year 1994, No. 93-4 (June 1993)

Expenditure Limits: Design and Implementation Issues, No. 93-5 (July 1993)

OTHER COMMISSION RESEARCH AND BACKGROUND PAPERS

Assignment and the Participation Physician Program: An Analysis of Beneficiary Awareness, Understanding, and Experience, No. 89-1 (September 1989)

Variation in Medicare Global Polices: Relationship to Current Payment and Implications for a Fee Schedule, No. 89-2 (November 1989)

Financial Incentives and Medical Practice: Evidence from Ontario on the Effect of Changes in Physician Fees on Medical Care Utilization, No. 89-3 (December 1989)

Medicare's Share in U.S. Physicians' Revenues, No. 89-4 (December 1989)

Survey of Visits and Consultations, No. 91-1 (April 1991)

Pre- and Postoperative Visits Associated with Surgical Global Services, No. 91-2 (August 1991)

Comments on the Notice of Proposed Rulemaking, No. 91-6 (August 1991)

The Role of Specialty Societies and Physicians in the Commission's Evaluation of Relative Work Values, No. 91-7 (November 1991)

Practice Expenses Under the Medicare Fee Schedule: A Resource-Based Approach, No. 92-1 (April 1992)

Background Papers Presented at the Commission's Conference on Profiling, No. 92-2 (April 1992)

Professional Liability Insurance Expenses Under the Medicare Fee Schedule: A Resource-Based Approach, No. 92-7 (December 1992)

These documents are available through the Commission office. If you would like to receive copies of any of these publications, please write or fax the Commission at 2120 L Street NW, Suite 200, Washington, DC 20037, fax 202/653-7238 or call 202/653-7220. Please include the number and title of the publication and allow two to four weeks for delivery. There is no charge for Commission publications.

APPENDIX F

GLOSSARY

ACRONYMS

AAFP	American Academy of Family Physicians
AAMC	Association of American Medical Colleges
AAPA	American Academy of Physician Assistants
AAPCC	Adjusted Average Per Capita Cost (Medicare)
AARP	American Association of Retired Persons
ACE	Accelerated-Compensation Event
ACG	Ambulatory Care Group
ACGME	Accreditation Council for Graduate Medical Education
ACH	Accountable Health Plan
ACNM	American College of Nurse-Midwives
ACOG	American College of Obstetricians and Gynecologists
ADR	Alternative Dispute Resolution
AFDC	Aid to Families with Dependent Children
AHCPR	Agency for Health Care Policy and Research, HHS
AHPB	Adjusted Historical Payment Basis
AIDS	Acquired Immune Deficiency Syndrome
AMA	American Medical Association
AOA	American Osteopathic Association
APDIM	Association of Program Directors in Internal Medicine
ASC	Ambulatory Surgical Center
ASIM	American Society of Internal Medicine
BCBS	Blue Cross Blue Shield
BCBSA	Blue Cross Blue Shield Association
BMAD	Part B Medicare Annual Data Files
BPO	Bureau of Program Operations, HCFA, HHS
CAT-Scan	Computerized Axial Tomography Scan
CBO	Congressional Budget Office
CBS	Current Beneficiary Survey (Medicare)
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
CHAMPVA	Civilian Health and Medical Program of the Veterans Administration
CHMIS	Community Health Management Information System
CHSO	Comprehensive Health Service Organization
CNM	Certified Nurse-Midwife
COGME	Council on Graduate Medical Education, HHS
CPI	Consumer Price Index

CPR	Customary, Prevailing, and Reasonable
CPT	Current Procedural Terminology
CQI	Continuous Quality Improvement
CRA	Community Rating Area
CRG	Cost-Related Group
CRNA	Certified Registered Nurse Anesthetist
CRS	Congressional Research Service
DCG	Diagnostic Cost Group
DEMPAQ	Developing and Evaluating Methods to Promote Ambulatory Care Quality
DRG	Diagnosis-Related Group
EBRI	Employee Benefit Research Institute
EKG	Electrocardiogram
EM	Evaluation and Management
ER	Emergency Room
FEHBP	Federal Employees Health Benefits Program
FEP	Federal Employee Program of the Blue Cross Blue Shield Association
FP	Family Practice
FY	Fiscal Year
GAF	Geographic Adjustment Factor
GAO	U.S. General Accounting Office
GDP	Gross Domestic Product
GHAA	Group Health Association of America
GME	Graduate Medical Education
GP	General Practice
GPCI	Geographic Practice Cost Index
HCFA	Health Care Financing Administration, HHS
HCPCS	HCFA Common Procedure Coding System
HCQIS	Health Care Quality Improvement System
HEDIS	Health Plan Employer Data and Information Set
HER	Health Economics Research, Inc.
HHS	U.S. Department of Health and Human Services
HIPC	Health Insurance Purchasing Cooperative
HIV	Human Immunodeficiency Virus
HMO	Health Maintenance Organization
HPPC	Health Plan Purchasing Cooperative
HPSA	Health Professional Shortage Area
HRSA	Health Resources and Services Administration, HHS
HSA	Health Service Area
HSQB	Health Standards and Quality Bureau, HCFA, HHS
ICD-9-CM	International Classification of Diseases, Ninth Revision, Clinical Modification
ICU	Intensive Care Unit
IHPP	Intergovernmental Health Policy Project
IOM	Institute of Medicine

IPA	Independent Practice Association
MEI	Medicare Economic Index
MRI	Magnetic Resonance Imaging
MSA	Metropolitan Statistical Area
NACHC	National Association of Community Health Centers
NCH	National Claims History (Medicare)
NCI	National Cancer Institute
NCQA	National Committee for Quality Assurance
NHIS	National Health Interview Survey
NHSC	National Health Service Corps, HHS
NIH	National Institutes of Health, HHS
NMES	National Medical Expenditure Survey
NMIHS	National Maternal and Infant Health Survey
NORC	National Opinion Research Corporation
NP	Nurse Practitioner
NPDB	National Practitioner Data Bank
NPP	Nonphysician Practitioner
OACT	Office of the Actuary, HCFA, HHS
OBRA	Omnibus Budget Reconciliation Act
OECD	Organization for Economic Cooperation and Development
OHTA	Office of Health Technology Assessment, AHCPR, HHS
OIG	Office of the Inspector General, HHS
OPM	Office of Personnel Management
OTA	Office of Technology Assessment, U.S. Congress
PA	Physician Assistant
PACS	Payment Amounts for Capitated Systems
PAR	Participating Physician and Supplier Program (Medicare)
PF	Provider File
PHP	Prepaid Health Plan
PLI	Professional Liability Insurance
PPO	Preferred Provider Organization
PPRC	Physician Payment Review Commission
PPS	Prospective Payment System (Medicare)
PRO	Peer Review Organization (Medicare)
ProPAC	Prospective Payment Assessment Commission
PSU	Primary Sampling Unit
RBRVS	Resource-Based Relative Value Scale
RN	Registered Nurse
RRC	Residency Review Committee
RUC	AMA RVS Update Committee
RV	Relative Value
RVS	Relative Value Scale
RVU	Relative Value Unit

RWV	Relative Work Value
SAF	Standard Analytical Files
SGIM	Society of General Internal Medicine
SSI	Supplemental Security Income
TEP	Technology Evaluation Program, BCBS
UCR	Usual, Customary, and Reasonable
UPIN	Unique Provider Identification Number (Medicare)
UR	Utilization Review
V/I	Volume and Intensity
VPS	Volume Performance Standard (Medicare)
WEDI	Workgroup for Electronic Data Interchange

HEALTH SYSTEM REFORM PROPOSALS REFERENCED IN THIS REPORT (103rd CONGRESS)

Affordable Health Care Now Act S. 1533/H.R. 3080
Introduced by Senator Trent Lott and Representative Robert H. Michel

American Health Security Act S. 491/H.R. 1200
Introduced by Senator Paul D. Wellstone and Representative Jim McDermott

Comprehensive Family Health Access and Savings Act S. 1807/H.R. 3918
Introduced by Senator Phil Gramm and Representative Rick Santorum

Consumer Choice Health Security Act S. 1743/H.R. 3698
Introduced by Senator Don Nickles and Representative Cliff Stearns

Health Care Cost Containment and Reform Act H.R. 200
Introduced by Representative Fortney "Pete" Stark

Health Equity and Access Reform Today Act S. 1770/H.R. 3704
Introduced by Senator John H. Chafee and Representative William M. Thomas

Health Security Act (the Administration's proposal) S. 1757/H.R. 3600
Introduced by Senator George J. Mitchell and Representative Richard A. Gephardt on behalf of the Administration

Managed Competition Act S. 1579/H.R. 3222
Introduced by Senator John B. Breaux and Representative Jim Cooper

Mediplan Health Care Act H.R. 2610
Introduced by Representative Fortney "Pete" Stark

LEGISLATION (Listed Chronologically)

HMO Act	Health Maintenance Organization Act of 1973, P.L. 93-222, enacted December 29, 1973.
OBRA80	Omnibus Budget Reconciliation Act of 1980, P.L. 96-499, enacted December 5, 1980.
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982, P.L. 97-248, enacted September 3, 1982.
DEFRA	Deficit Reduction Act of 1984, P.L. 98-369, enacted July 18, 1984.
COBRA	Consolidated Omnibus Budget Reconciliation Act of 1985, P.L. 99-272, enacted April 7, 1986.
OBRA86	Omnibus Budget Reconciliation Act of 1986, P.L. 99-509, enacted October 21, 1986.
OBRA87	Omnibus Budget Reconciliation Act of 1987, P.L. 100-203, enacted December 21, 1987.
MCCA	Medicare Catastrophic Coverage Act of 1988, P.L. 100-360, enacted July 1, 1988; repealed December 13, 1989.
OBRA89	Omnibus Budget Reconciliation Act of 1989, P.L. 101-239, enacted December 19, 1989.
OBRA90	Omnibus Budget Reconciliation Act of 1990, P.L. 101-508, enacted November 3, 1990.
OBRA93	Omnibus Budget Reconciliation Act of 1993, P.L. 103-66, enacted August 10, 1993.

TERMS

Access: The ability to obtain needed medical care.

Adjusted Average Per Capita Cost (AAPCC): An estimate of the average cost incurred by Medicare per beneficiary in the fee-for-service system, adjusted by county for

geographic cost differences and differences in age, sex, disability status, Medicaid eligibility, and institutional status.

Alliance: A regional health insurance purchasing entity specified in the Administration's health system reform proposal that would enroll individuals, collect premiums, purchase enrollees' insurance from participating health plans, and enforce the rules that manage health plan competition. See Health Plan Purchasing Cooperative.

Alternative Dispute Resolution (ADR): Procedures used in a system outside of the courts to resolve legal claims.

Approved Charge (Allowed Charge): The amount Medicare approves for payment to a physician. Typically, Medicare pays 80 percent of the approved charge and the beneficiary pays the remaining 20 percent. Physicians may bill beneficiaries for an additional amount above the approved charge. See Balance Billing.

Assignment (Medicare): An agreement in advance by a physician to accept Medicare's allowed charge as payment in full (guarantees not to balance bill). Medicare pays its share of the allowed charge directly to physicians who accept assignment and provides other incentives under the Participating Physician and Supplier Program. See Balance Billing, Participating Physician, Participating Physician and Supplier Program, Nonparticipating Physicians.

Balance Billing: In fee-for-service health insurance, the practice of billing patients in excess of the amount approved by the health plan.

Behavioral Offset: See Volume Offset.

Beneficiary: A person who is eligible for or receiving benefits under an insurance policy or plan. The term is commonly applied to individuals receiving benefits under the Medicare or Medicaid programs or covered under a private health insurance plan.

Benefit Package: Services covered by a health insurance plan and the financial terms of such coverage, including cost sharing and limitations on amounts of services. See Cost Sharing, Standard Benefit Package.

Bonus Payment: An additional amount paid by Medicare for services provided by physicians in Health Professional Shortage Areas. Currently the bonus payment is 10 percent of Medicare's 80 percent share of allowed charges. See Health Professional Shortage Area.

Budget Neutrality: For the Medicare program, adjustment of payment rates when policies change so that total spending under the new rules is expected to be the same as it would have been under the previous payment rules.

Bundling: The use of a single payment for a group of related services. For an example of bundling, see Global Surgery Policy.

Capitation: A health insurance payment mechanism in which a fixed amount is paid per person to cover services; a fixed, per capita payment.

Carrier (Medicare): A private contractor that administers claims processing and payment for Part B services. See Supplementary Medical Insurance.

Case Management: Monitoring and coordinating the delivery of health services for individual patients to enhance care and manage costs; often used for patients with specific diagnoses or who require high-cost or extensive health care services.

Certificate of Merit: A requirement that an independent medical expert review the medical record and certify that a claim has merit before a formal medical malpractice lawsuit can be filed.

Coding: A mechanism for identifying and defining physicians' services. See Current Procedural Terminology (CPT).

Coinsurance: A type of cost sharing where the insured party and insurer share payment of the approved charge for covered services in a specified ratio after payment of the deductible. Under Medicare Part B, the beneficiary pays coinsurance of 20 percent of allowed charges. See Copayment, Cost Sharing, Deductible.

Collateral Source Rule: A legal rule that prohibits consideration of other payments, such as those from health or disability insurance, received by a claimant for losses because of an injury.

Community Rating: A method for establishing health insurance premiums whereby an insurer's premium is the same for all individuals in a premium class within a specific geographic area. See Community Rating Area, Premium, Premium Class.

Community Rating Area (CRA): Under community rating, a defined geographic area for which each insurer must establish a single set of health insurance premiums. See Community Rating, Premium Class.

Conversion Factor: The multiplicative factor used to translate relative value units into dollar amounts for physician payments under a fee schedule.

Conversion Factor Update: Annual percentage change in each Medicare Fee Schedule conversion factor, established by the Congress or the default formula under Volume Performance Standards.

Copayment: A type of cost sharing where the insured party is responsible for paying a fixed dollar amount per service. Sometimes used more generally as a synonym for cost sharing. See Coinsurance, Cost Sharing, Deductible.

Cost Sharing: A health insurance policy provision that requires the insured party to pay a portion of the costs of covered services. Deductibles, coinsurance, copayment, and balance bills are types of cost sharing. See Balance Billing, Coinsurance, Copayment, Deductible.

Cost Shifting: A situation wherein a health care provider compensates for the effect of lower revenue from one payer by increasing charges to another payer.

Coverage Decision: A decision by a health plan or insurer whether to pay for or provide a medical service or technology for particular clinical indications.

Current Procedural Terminology (CPT): The coding system for physicians' services developed by the CPT Editorial Panel of the American Medical Association; basis of the Medicare HCPCS coding system for physicians' services. See Coding, HCFA Common Procedures Coding System.

Customary Charge: One of the screens previously used to determine a physician's payment for a service under Medicare's customary, prevailing, and reasonable payment system. Customary charges were calculated as the physician's median charge for a given service over a prior 12-month period. See Customary, Prevailing, and Reasonable.

Customary, Prevailing, and Reasonable (CPR): The method of paying physicians under Medicare from 1965 until implementation of the Medicare Fee Schedule in January 1992. Payment for a service was limited to the lowest of (1) the physician's billed charge for the service, (2) the physician's customary charge for the service, or (3) the prevailing charge for that service in the community. Similar to the usual, customary, and reasonable system used by private insurers. See Customary Charge, Medicare Fee Schedule, Prevailing Charge.

Data Clearinghouse: An organization that serves as an electronic hub, collecting data directly from providers, consumers, and health plans. It then makes data available to health plans, governments, and other organizations as needed for various functions.

Deductible: A type of cost sharing where the insured party pays a specified amount of approved charges for covered medical services before the insurer will assume liability for all or part of the remaining covered services. See Coinsurance, Copayment, Cost Sharing.

Diagnosis-Related Groups (DRGs): A system of classifying patients on the basis of diagnoses for purposes of payment to hospitals. See Prospective Payment System.

Direct Costs: The labor, supply, and equipment costs directly attributable to the provision of a specific service. See Indirect Costs.

Dual Eligible: A Medicare beneficiary who also receives the full range of Medicaid benefits offered in his or her state.

Effectiveness: The net health benefits provided by a medical service or technology for typical patients in community practice settings.

Efficacy: The net health benefits provided by a medical service or technology under ideal conditions, usually in controlled, expert settings with carefully selected patients.

Enterprise Liability: The assumption of liability by a health care organization for all negligent injuries to patients under its care, thereby relieving individual practitioners of all personal liability for such injuries.

Essential Community Providers: Providers such as community health centers that have traditionally served low-income populations. The Administration's health reform proposal includes special payment rules to these organizations for five years.

Evaluation and Management (EM) Service: A nontechnical service, such as a visit or consultation, provided by most physicians for the purpose of diagnosing and treating diseases and counseling patients.

Expenditure Limit: A maximum level of spending for the health sector as a whole or for particular categories of services; usually set by the government to be achieved through rate setting or premium limits. See Rate Setting.

Experience Rating: A system used by insurers to set premium levels based on the insured's past loss experience. For example, rating may be based on service utilization for health insurance or on liability experience for professional liability insurance. See Community Rating.

Federally Qualified HMO: An HMO that has satisfied certain federal qualifications pertaining to organizational structure, provider contracts, health service delivery information, utilization review and quality assurance, grievance procedures, financial status, and marketing information, as specified in Title XIII of the Public Health Service Act. See Health Maintenance Organization.

Fee for Service: A method of paying health care providers for individual medical services rendered, as opposed to paying them salaries or capitated payments. See Capitation.

Fee Schedule: A list of predetermined payment rates for medical services. See Medicare Fee Schedule.

Fee Schedule Payment Areas: A geographic area within which payment for a given service under the Medicare Fee Schedule will be equal. See Geographic Adjustment Factor.

Gaming: Gaining advantage by using improper means to evade the letter or intent of a rule or system.

Generalists: Physicians who are distinguished by their training as not limiting their practice by health condition or organ system, who provide comprehensive and continuous services, and who make decisions about treatment for patients presenting with undifferentiated symptoms. Typically include family practitioners, general internists, and general pediatricians.

Geographic Adjustment Factor (GAF): Price adjusters applied to the three components of the Medicare Fee Schedule to determine the correct payment in each fee schedule payment area. As defined in OBRA89, there is a geographic adjustment factor for each component of the Medicare Fee Schedule: physician work, practice expense, and malpractice expense. See Fee Schedule Payment Areas, Geographic Practice Cost Index, Medicare Fee Schedule.

Geographic Practice Cost Index (GPCI): An index summarizing the prices of staffing and other resources required to provide physicians' services in an area relative to national average prices. The GPCI is based on three components that reflect the opportunity cost of physician work, practice expense, and malpractice expense. See Geographic Adjustment Factor.

Global Service: A package of clinically related services treated as a unit for purposes of billing, coding, or payment.

Global Surgery Policy: The payment policy in the Medicare Fee Schedule that specifies the surgical procedure and the related services and visits that are included in a global surgical fee. Separate payment is permitted for the initial evaluation, services for unrelated problems, and return trips to the operating room because of complications. See Surgical Global Service.

Graduate Medical Education (GME): The period of medical training that follows graduation from medical school; commonly referred to as residency, internship, and fellowship training. See Undergraduate Medical Education.

Gross Domestic Product (GDP): The total current market value of all goods and services produced domestically during a given period; differs from the gross national product by excluding net income that residents earn abroad.

Group-Model HMO: An HMO that pays a medical group a negotiated, per capita rate, which the group distributes among its physicians, often under a salaried arrangement. See Health Maintenance Organization, Independent Practice Association, Staff-Model HMO.

Guaranteed Issue: The requirement that each insurer and health plan accept everyone who applies for coverage and guarantee the renewal of that coverage as long as the applicant pays the premium.

HCFA Common Procedure Coding System (HCPCS): A Medicare coding system based on CPT, but supplemented with additional codes. See Coding, Current Procedural Terminology.

Health Insurance Purchasing Cooperative (HIPC): See Health Plan Purchasing Cooperative.

Health Maintenance Organization (HMO): A type of managed-care health plan that acts as both insurer and provider of a comprehensive set of health care services to an enrolled population. Benefits are financed by prepaid premiums with limited copayments, and services are provided through a system of affiliated providers. See Managed Care, Health Plan, Group-Model HMO, Independent Practice Association, Staff-Model HMO.

Health Plan: An organization that acts as insurer for an enrolled population; may be structured as a fee-for-service or managed-care plan. See Fee for Service, Managed Care, Point-of-Service Plan.

Health Plan Purchasing Cooperative (HPPC): A health insurance purchasing entity advanced by some health system reform proposals to enroll individuals, collect premiums, purchase enrollees' insurance from participating health plans, and enforce the rules that manage health plan competition. Also called health insurance purchasing cooperative (HIPC) or alliance. See Alliance.

Health Professional Shortage Area (HPSA): An urban or rural geographic area, a population group, or a public or nonprofit private medical facility that the Secretary of Health and Human Services determines to be served by too few health professionals. Physicians who provide services in HPSAs qualify for the Medicare bonus payment. Replaces Health Manpower Shortage Area.

Hospital Insurance (HI): The Medicare program that covers the cost of hospital and related post-hospital services. Eligibility is normally based on prior payment of payroll taxes. Beneficiaries are responsible for an initial deductible per spell of illness and copayments for some services. Also called Part A coverage or benefits.

Independent Practice Association (IPA): An HMO that contracts with individual physicians to provide services to HMO members at a negotiated per capita or fee-for-service rate. Physicians maintain their own offices and can contract with other HMOs and see other fee-for-service patients. See Group-Model HMO, Health Maintenance Organization, Staff-Model HMO.

Indirect Costs: Those costs that cannot be easily traced to particular services, but which must be assigned using explicit accounting methods. Sometimes referred to as common or overhead costs. See Direct Costs.

Intensity of Service: See Volume and Intensity of Service.

Joint and Several Liability: A legal rule that holds any defendant responsible for up to the full award in a medical malpractice case if any other defendants cannot pay their shares apportioned by fault.

Limiting Charge: The maximum amount that a nonparticipating physician is permitted to charge a Medicare beneficiary for a service; a limit on balance billing. Starting in 1993 the limiting charge is 115 percent of the Medicare allowed charge. See Balance Billing, Nonparticipating Physician.

Locality (Medicare): See Fee Schedule Payment Area.

Malpractice Expense: The cost of professional liability insurance incurred by physicians. A component of the Medicare relative value scale. See Relative Value Scale.

Managed Care: Any system of health service payment or delivery arrangements where the health plan attempts to control or coordinate use of health services by its enrolled members in order to contain health expenditures, improve quality, or both. Arrangements often involve a defined delivery system of providers with some form of contractual arrangement with the plan. See Health Maintenance Organization, Independent Practice Association, Preferred Provider Organization.

Managed Competition: An approach to health system reform in which health plans compete to provide health insurance coverage for enrollees. Typically, enrollees would sign up with a health plan purchasing entity and would be offered a choice of health plans during an open season. See Health Plan, Alliance, Health Plan Purchasing Cooperative.

Medicaid: A program of federal matching grants to the states to provide health insurance for categories of the poor and medically indigent. States determine eligibility, payments, and benefits consistent with federal standards.

Medicare Adjuster: A proposed adjustment to a service's relative work value to reflect accurately the difference in work involved in treating elderly patients.

Medicare Economic Index (MEI): An index that tracks changes over time in physician practice costs. From 1975 through 1991, increases in prevailing charge screens were limited to increases in the MEI. It is the starting point for updates under the VPS. See Prevailing Charge.

Medicare Fee Schedule: The resource-based fee schedule currently used by Medicare to pay for physicians' services. Replaced the CPR payment method. See Customary, Prevailing and Reasonable; Resource-Based Relative Value Scale; Conversion Factor; Geographic Adjustment Factor.

Medicare Risk Contract: A contract between Medicare and an HMO or competitive medical plan under which the plan provides Medicare-covered services for enrollees and receives monthly capitated payments from Medicare, thereby assuming insurance risk for its enrollees.

Medigap Insurance: Private health insurance policies designed to supplement Medicare coverage. Benefits may include payment of Medicare deductibles, coinsurance, and balance bills, and payment for services not covered by Medicare.

Modifier: An additional coding element that permits payment to differ for a subset of services billed under a code.

National Claims History (NCH) System: A HCFA data reporting system that combines both Part A and Part B claims in a common file. The NCH system became fully operational in 1991.

National Practitioner Data Bank: A computerized data bank maintained by the federal government that contains information on physicians against whom malpractice claims have been paid or certain disciplinary actions have been taken.

No-Fault: A legal standard that compensates claimants for injuries due to medical care whether or not the care they received was substandard.

Nonparticipating Physician: A physician who does not sign a participation agreement and, therefore, is not obligated to accept assignment on all Medicare claims. See Participating Physician, Participating Physician and Supplier Program.

Nonphysician Practitioner (NPP): A health care professional who is not a physician. NPPs addressed in this report are advance practice nurses and physician assistants. Advance practice nurses include nurse practitioners, clinical nurse specialists, certified nurse-midwives, and certified registered nurse anesthetists.

Outcome: The consequence of a medical intervention on a patient.

Outcomes and Effectiveness Research: Medical or health services research that attempts to identify and understand the clinical outcomes (including mortality, morbidity, and functional status) of the delivery of health care.

Overvalued Procedure: A procedure for which the payment rate was reduced in legislation because the Congress found it to be overvalued under the previous Medicare payment system.

Paid Amount: The portion of a submitted charge that is actually paid, by both third-party payers and the insured, including copayments and balance bills. For Medicare this amount may be less than the approved (allowed) charge if the submitted charge is less, or it may be more because of balance billing. See Approved Charge, Payment Rate, Submitted Charge, Balance Billing.

Part A (Medicare): See Hospital Insurance.

Part B (Medicare): See Supplementary Medical Insurance.

Partial Capitation: An insurance arrangement where the premium paid to a health plan is a combination of a capitated premium and payment based on actual use of services; the proportions specified for these components determine the insurance risk faced by the plan.

Participating Physician: A physician who signs a participation agreement, agreeing to accept assignment on all Medicare claims for one year.

Participating Physician and Supplier Program (PAR): A program that provides financial and administrative incentives for physicians and suppliers to agree in advance to accept assignment on all Medicare claims for a one-year period.

Payment Rate: The total amount paid for each unit of service rendered by a health care provider, including both the amount covered by the insurer and the consumer's cost sharing. For Medicare payments to physicians this is the same as the approved (allowed) charge. See Approved Charge.

Peer Review Organization (PRO): An organization contracting with HCFA to review the medical necessity and quality of care provided to Medicare beneficiaries; formally called Utilization and Quality Control Peer Review Organization.

Performance Measure: A specific measure of how well a health plan does in providing health services to its enrolled population. Can be used as a measure of quality. Examples include percentage of diabetics receiving annual referrals for eye care, mammography rate, and percentage of enrollees indicating satisfaction with care.

Periodic Review of Relative Values: The recalibration of the relative value scale to account for changes that occur over time. HCFA is required to conduct a periodic review at least every five years.

Physician Work: A measure of the time, physical effort and skill, mental effort and judgment, and stress from iatrogenic risk. A component of the Medicare relative value scale.

Point-of-Service Plan: A managed-care plan that combines features of both prepaid and fee-for-service insurance. Health plan enrollees decide whether to use network or non-network providers at the time care is needed and usually are charged sizable copayments for selecting the latter. See Health Plan, Health Maintenance Organization, Preferred Provider Organization.

Practice Expense: The cost of nonphysician resources incurred by the physician to provide services. Examples are salaries and fringe benefits received by employees of the physician, and the expenses associated with the purchase and use of medical equipment and supplies in the physician's office. A component of the Medicare relative value scale.

Practice Guideline: An explicit statement of what is known and believed about the benefits, risks, and costs of particular courses of medical action. Intended to assist decisions by practitioners, patients, and others about appropriate health care for specific clinical conditions.

Preferred Provider Organization (PPO): A managed-care health plan that contracts with networks or panels of providers to furnish services and be paid on a negotiated fee schedule. Enrollees are offered a financial incentive to use providers on the preferred list, but may use non-network providers as well. See Health Plan, Managed Care.

Premium: An amount paid periodically to purchase health insurance benefits.

Premium Class: An accepted group of enrollees used for establishing insurance premiums. See Community Rating, Premium.

Prevailing Charge: One of the screens that determined a physician's payment for a service under the Medicare CPR payment system. In Medicare, it was the 75th percentile of customary charges, with annual updates limited by the MEI. See Customary Charge; Customary, Prevailing, and Reasonable; Medicare Fee Schedule; Medicare Economic Index.

Professional Component: The part of a relative value or fee that represents the cost of a physician's interpretation of a diagnostic test or treatment planning for a therapeutic procedure. See Technical Component.

Professional Liability Insurance (PLI): The insurance physicians purchase to help protect themselves from the financial risks associated with malpractice claims.

Profiling: Expressing a pattern of practice as a rate—some measure of utilization (costs or services) or outcome (functional status, morbidity, or mortality) aggregated over time for a defined population of patients—to compare with other practice patterns. May be done for physician practices, health plans, or geographic areas.

Prospective Payment System (PPS): The Medicare system used to pay hospitals for inpatient hospital services; based on the DRG classification system. See Diagnosis-Related Groups.

Quality Assurance: A formal, systematic process to improve quality of care that includes monitoring quality, identifying inadequacies in delivery of care, and correcting those inadequacies.

Rate Setting: An approach to cost containment where the government establishes payment rates for all payers for various categories of health services.

Refinement: The correction of relative work values in the relative value scale that were initially set incorrectly.

Reinsurance: An insurance arrangement where an insurer pays a premium into a pool, and any claims paid by the insurer above a predefined dollar level are covered in whole or in part by the pool.

Relative Value (RV): A value that reflects a comparison with an arbitrary standard.

Relative Value Scale (RVS): An index that assigns weights to each medical service; the weights represent the relative amount to be paid for each service. The RVS used in the development of the Medicare Fee Schedule consists of three cost components: physician work, practice expense, and malpractice expense. See Malpractice Expense, Medicare Fee Schedule, Physician Work, Practice Expense, Resource-Based Relative Value Scale.

Relative Work Value (RWV): An assigned value that reflects the average work of a physician of average efficiency relative to a standard. See Relative Value Scale.

Resource-Based Relative Value Scale (RBRVS): A relative value scale that is based on the resources involved in providing a service. See Relative Value Scale.

Revenue Neutrality: Adjustment of payment rates under a new policy so that total revenues of a defined group of providers is expected to be the same as it would have been under the previous payment policy.

Revenue Share: The proportion of a practice's total revenue devoted to a particular type of expense. For example, the practice expense revenue share is that proportion of revenue used to pay for practice expense.

Risk Adjuster: A risk measure used to adjust payments made to a health plan on behalf of a group of enrollees in order to compensate for expenses that are expected to be lower or higher than average, based on the risk status of the enrollees.

Risk Selection: Any situation where health plans differ in the health risk associated with their enrollees as a result of enrollment choices made by health plans or enrollees, that is, where one group's or health plan's expected costs differ from those of another group or health plan.

Severity Modifier: An adjustment that reflects the effect of patient factors, such as severity of illness, comorbidity, or risk of complications, on the relative work required to deliver a service.

Site-of-Service Differential: The difference in the amount paid when the same service is performed in different practice settings, for example, an outpatient visit in a physician's office or a hospital clinic.

Specialty Differential: A difference in the amount paid for the same service when performed by physicians in different specialties. Eliminated from Medicare effective 1992.

Staff-Model HMO: An HMO in which physicians practice solely as employees of the HMO and usually are paid a salary. See Group-Model HMO, Health Maintenance Organization.

Standard Benefit Package: A defined set of health insurance benefits that all insurers are required to offer. See Benefit Package.

State Practice Acts: State licensing laws for physicians, nurses, and other health care professionals that define each recognized health care profession and its legal scope of practice.

Submitted Charge: The charge submitted by a provider to the patient or a payer. See Paid Amounts.

Supplementary Medical Insurance (SMI): The Medicare program that covers the costs of physicians' services, outpatient laboratory and X-ray tests, durable medical equipment, outpatient hospital care, and certain other services. This voluntary program requires payment of a monthly premium, which covers about 25 percent of program costs. Beneficiaries are responsible for a deductible and coinsurance payment for most covered services. Also called Part B coverage or benefits.

Supplier: A provider of health care services, other than a practitioner, that is permitted to bill under Medicare Part B. Suppliers include independent laboratories, durable medical equipment providers, ambulance services, orthotists, prosthetists, and portable X-ray providers.

Surgical Global Service: A package of services that are clinically related to either major or minor surgical procedures. See Global Surgery Policy.

Technical Component: The part of a relative value or fee for a diagnostic test or therapeutic procedure that represents the costs of performing the service excluding the physician's work. See Professional Component.

Technology Assessment: In health policy, a synthesis of information on the safety, effectiveness, and cost of a service or technology to predict how providing it would affect patients and the health care system.

Tort Reform: Changes in the legal rules governing medical malpractice lawsuits.

Undergraduate Medical Education: The medical training provided to students in medical school. See Graduate Medical Education.

Unique Provider Identification Number (UPIN): A unique number assigned to each physician or other practitioner billing the Medicare program.

Upcode: To bill for a service using a code with a higher relative value than the one that is most appropriate for the service rendered.

Update for New and Revised Codes: Yearly process of determining the relative values of new and revised codes for the Medicare Fee Schedule.

Usual, Customary, and Reasonable (UCR): A method used by private insurers for paying physicians based on charges commonly used by physicians in a local community.

Sometimes called customary, prevailing, and reasonable charges. See Customary, Prevailing, and Reasonable.

Utilization Review (UR): The review of services delivered by a health care provider or supplier to determine whether those services were medically necessary; may be performed on a concurrent or retrospective basis.

Visit Crosswalk: The assumed relationship between discontinued CPT codes and those new codes that replace them.

Volume and Intensity (V/I) of Services: The quantity of health care services per enrollee, taking into account both the number and the complexity of the services provided.

Volume (Behavioral) Offset: The change in the quantity and intensity of services that is projected to occur in response to a change in fees. A 50 percent volume offset means that half the savings from fee reductions will be offset by an increased volume of services.

Volume Performance Standard (VPS): A mechanism to adjust fee updates for the Medicare Fee Schedule based on how annual increases in actual expenditures compare to previously determined performance standard rates of increase.

Work Relative Value: See Relative Work Value.

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